

ANNUAL REPORT

OF THE

DEPARTMENT OF PUBLIC WORKS

OF THE

PROVINCE OF ALBERTA

1916

PRINTED BY ORDER OF THE LEGISLATIVE ASSEMBLY



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THE UNIVERSITY OF CHICAGO

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EDMONTON, February 24th, 1917.

To His Honour

ROBERT GEORGE BRETT,

Lieutenant Governor of the Province of Alberta.

May It Please Your Honour:—The undersigned has the honour to submit herewith the Report of the Department of Public Works for the year ending December 31st, 1916.

Respectfully submitted,

CHAS. STEWART,

Minister of Public Works.

REPORT OF THE DEPUTY MINISTER OF PUBLIC WORKS

HON. CHAS. STEWART,

Minister of Public Works.

SIR,—I have the honour to submit herewith the Report of the Department of Public Works for the year 1916.

The scarcity of labour and the high cost of material, due doubtless to the war, has increased the cost of all work, but every effort has been put forth to carry on the work with economy.

Detailed reports from each of the various branches of the Department will be found in the following pages, and all show most satisfactory progress. These detailed reports give as full information as possible, and it will only be necessary in presenting these to you to refer generally to the main points in connection with them.

The branch of the work involving the largest expenditure, and which, from the nature of the work, is of greatest importance to the largest number of people of the Province, is the Highways Branch, dealing with roads, and bridges and ferries. Owing to the greatly increased cost of steel structures it has been considered in the public interest to limit such work, while high prices continue, to as small a number as possible. The largest steel bridge dealt with during the year was that over the Red Deer River at Hagen's Crossing, west of Olds. This was to replace the structure which was lost in the floods of 1915. The new bridge was completed and opened for traffic in March of 1916. It consists of three 125 foot spans on concrete piers and abutments, two 50 foot timber truss spans, and 180 feet of pile trestle. In addition, a large amount of bank protection work above the bridge was put in. Although, owing to the nature of the material encountered, many difficulties were met with in getting the concrete down to suitable foundations, these were satisfactorily overcome, and it is thought that future floods on this river cannot seriously affect this bridge. Some smaller steel bridges were completed, and others were in course of construction at the end of the season. On the whole, however, in accordance with the policy above mentioned, the total number of bridges dealt with was somewhat smaller than during the previous year.

The work on roads was carried out along the same lines as in previous years, but serious difficulties were met with in parts of the Province owing to wet weather and the great depth of water in the sloughs. This condition, of course, leads to the consideration of drainage, and the Drainage Act passed at the last Session of the Legislature will doubtless in the near future be taken advantage of in many parts of the country. The question of maintenance of roads referred to last year has not been neglected, and an endeavor has been made

to keep in good condition, by proper maintenance, the roads we have already constructed. The mileage of roads constructed is, of course, constantly growing and the maintenance is a constantly increasing burden, and if we continue the present system the time is within measurable distance when the amount available for road expenditure will all be required to maintain the roads constructed. Maintenance is, of course, absolutely necessary, and this problem is one which we must look for a solution of in the near future.

I am pleased to be able to say that more and more are we being requested by Local Improvement and Rural Municipal authorities to take charge of the expenditure of monies for them on their roads, so that they may receive the advantage of our experienced organization. This is gratifying, as it seems to show that they appreciate that an honest effort is being made to serve the best interests of the Province.

Notwithstanding the difficulties met with on account of bad weather conditions and shortage of labour, a large amount of road work was carried to completion. Links were added in many places in the Trunk Road System of the Province, which, in the course of a few years, will, we hope, be connected up and form a system which will be a great asset to the Province. Before leaving the question of roads and bridges, I would like to point out that we have taken advantage of the comparatively quiet time in steel bridge construction to have revised and brought up-to-date our standard plans of steel bridges, and I am pleased to have to report that we have now a set of standard plans and specifications for steel highway spans running from 60 feet to 200 feet which we believe to be the most up-to-date and complete in the Dominion.

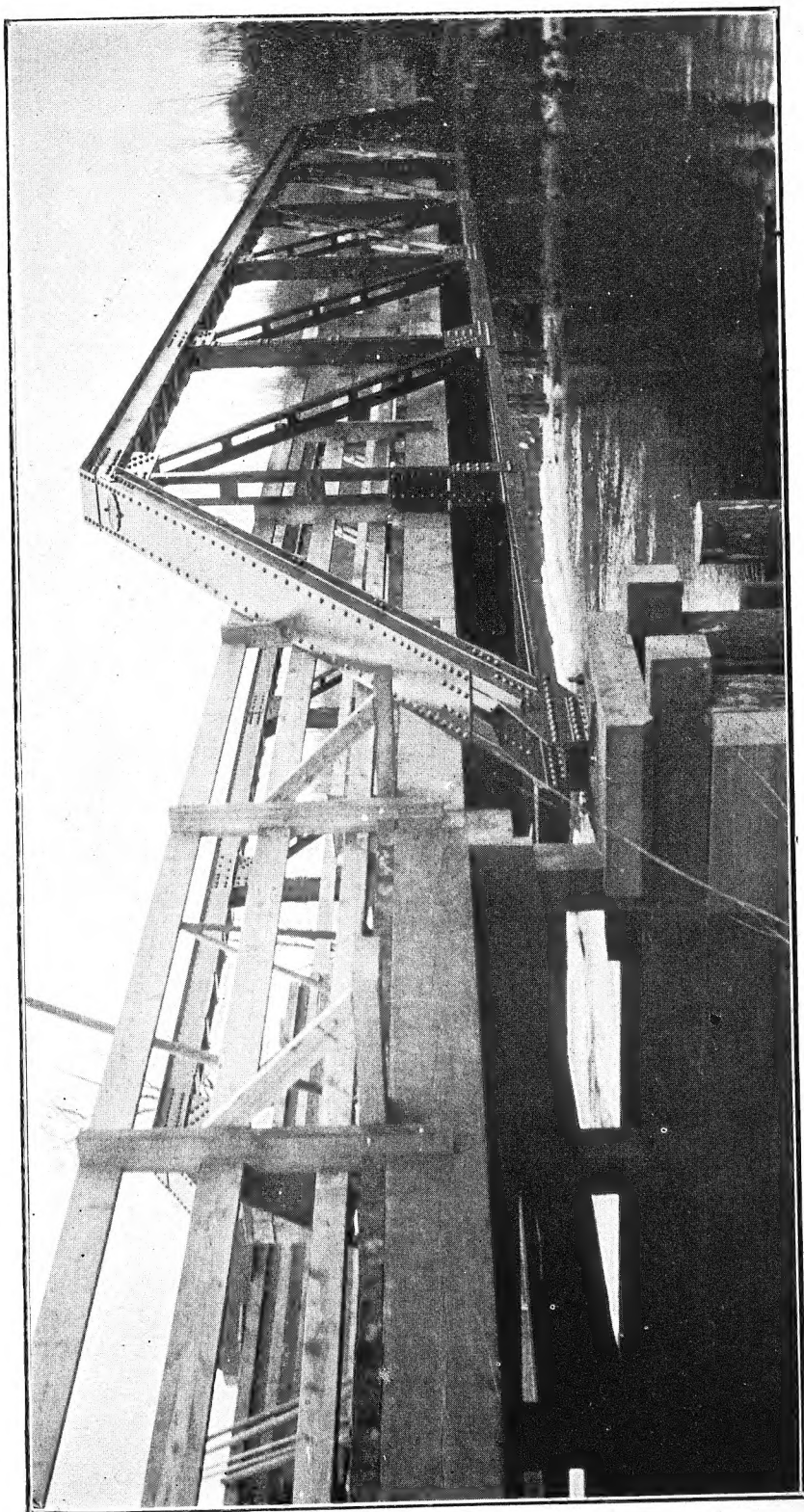
The geographical position of the Province is such that a great amount of bridge construction is necessary, and we hope to be in shape when the development comes, which must come after the war, to be ready to meet the requirements.

The ferry service in the Province has been very satisfactory during the year. Considering the number of ferries operated and the flood conditions that sometimes exist, it is pleasing to note that no fatal accidents occurred.

An interesting part of the season's work was the addition of a power sweep to the ferry at Peace River Crossing. The river at this point is a very unsatisfactory stream on which to operate a current ferry. In low water the current is sluggish, and with the wind blowing up-stream the scow is carried up under the cable and trouble occurs. Some considerable experimenting was required, but eventually a gasoline engine and propeller were so arranged as to operate with great success, and the time of crossing reduced from thirty or thirty-five minutes to six or seven minutes.

The report of the Highways Branch gives full particulars in regard to Roads, Bridges and Ferries.

In the Architectural Branch the new work performed has been much less than that during any previous year, but the routine work has been increased, as the general repair and maintenance of all provincial buildings has been placed under the supervision of this branch. An endeavor has been made to place this work on a systematic basis and with good results.



100' STEEL SPAN, TWO 16' TIMBER APPROACHES, NORTH-EAST OF HARDISTY.



125' SPAN, BATTLE RIVER, NORTH OF CASTOR.



125' SPAN ON PILE ABUTMENTS OVER BATTLE RIVER, NORTH OF CASTOR.



200' SPAN ON CONCRETE ABUTMENTS OVER OLDMAN RIVER, NORTH OF COWLEY.

At Ponoka Hospital for the Insane a new Kitchen and Bakery building was added, which will be ready early in the new year.

The same conditions apply, however, to buildings as were referred to in regard to bridges, and it is considered a wise policy while high prices for material continue and labour is scarce to do as little building as we possibly can.

The report of the Provincial Architect gives particulars of the work carried on.

In the Surveys Branch the work carried on was along the usual lines with a slight reduction in the amount of work done owing to the fact that there was one party less in the field than usual in the last few years. The arrangement whereby Local Improvement Districts and Rural Municipalities arrange for right-of-way for roads surveyed within their boundaries, continues to work satisfactorily. It seems wise to continue to give these organizations the benefit of the knowledge of our trained engineers, and the arrangement is working out with the utmost harmony.

Full particulars of the work will be found in the report of the Assistant Director of Surveys.

In the Report of the Mines Branch of your Department it will be noted that there was a considerable increase in the amount of coal produced in the Province during the year 1916. This increase was due to the fact that a larger amount of coal was sold for consumption in the Provinces of Alberta, Saskatchewan and Manitoba. Notwithstanding the output of coal from Alberta, it will be noted that there is still a considerable quantity of American coal being consumed in these Provinces.

There were twenty fatal and eighty-five non-fatal accidents during the year. Every precaution is being taken to guard against accidents and to produce means for preventing, so far as possible, disastrous loss of life.

The report of the Mines Branch contains a more detailed statement than in previous years regarding the operations of the industry and the disposal of the product.

There are now in operation in the Province three Mine Rescue Cars besides a number of Mine Rescue Stations. Notwithstanding the large number of men who have left the mines and enlisted for Overseas Service, training in Mine Rescue and First Aid work has been carried on very successfully throughout the past year.

Full particulars will be found in the report of the Chief Inspector of Mines.

In the Steam Boilers Branch the work has been carried on successfully, a slight re-arrangement in the organization was made during the year with satisfactory results. Our Boiler Inspection Branch is justly proud of the fact that it is again able to report that no fatal accident has occurred during the year due to the explosion of a boiler, steam pipe, or any steam or air vessel or accessory carrying pressure. It is worthy of note that never since the erection of the Province has a fatal accident occurred. This is an enviable record and one that is better appreciated when it is remembered that in the

United States over a period of ten years the average number of explosions was 501 per annum, with average annual casualties of 258 killed and 458 injured.

The report of the Chief Boiler Inspector gives full details of the work of this branch during the year.

The work of the Accountant's Branch and that of the Correspondence Branch was carried on satisfactorily, and their reports show the extent of the work.

Mention was made in last year's report of the fact that a number of employees of your Department had enlisted for Overseas Service, and the following is our Roll of Honour:—

Allan, Adam.
Armstrong, R.
Baird, Harry.
Batters, G. S.
Brown, P. McL.
Calder, H. J.
Cawsey, J. S.
Coulson, R.
Craig, Tom.
Cross, Geo.
Dowe, W.
Duncan, W.
Duggan, John.
Fago, Joseph.
Fraser, James.
Garvin, C. O.
Girvan, J.
Gray, Thomas.
Hollingsworth, E.
Jones, Caleb.
Jones, J. E.
Kinsman, J.
Laidlaw, James.
Leighton, A. F.
Lunn, H. A.
Markes, A. E.
McGee, W.
McKay, Hugh (wounded and discharged).
McLean, N.
McNicol, D. J. (wounded).
Munro, W.
Napper, T.
Pierce, J. S.
Richardson, J.
Ross, H. O.
Ross, J.
Seward, A. E.
Solway, W. C.
Stewart, A. G.
Todd, R.
Turton, W. H. (wounded, discharged and returned to the service).
Urquhart, D.

Watson, James.
Williams, G.
Winters, J.
Woods, S. B.

As pointed out last year, the places of these men, where necessary, have been temporarily filled, but we are trusting that when peace is happily restored, they may all be able to return to their various positions in your Department.

Respectfully submitted,

L. C. CHARLESWORTH,

Deputy Minister.

HIGHWAYS BRANCH

L. C. CHARLESWORTH, Esq.,

Deputy Minister of Public Works,

Edmonton.

SIR,—I have the honour to submit herewith a report of the work performed by the Highways Branch of the Department of Public Works during the year ending December 31st, 1916.

The construction and maintenance of roads was carried out along the same general lines as during previous years. The main trunk roads were maintained in good shape and additional portions were constructed where required. The main roads were kept in repair and extended as much as the funds at our disposal would permit. A considerable amount of work was done on local roads where existing conditions imposed a hardship on the settlers, which the local organization was unable to alleviate. The administration of the local improvement trust fund was conducted in such a manner as to obtain the best possible results for the people interested.

An increasingly large number of local improvement districts and rural municipalities have employed this department to make road expenditures. They find that the best results are produced when their funds are expended by an efficient organization under an experienced foreman.

This goes to prove that the work of our road organization is appreciated.

The number of bridges dealt with in 1916 was somewhat smaller than in the previous year. There were 179 bridges repaired and 299 constructed, making a total of 478 dealt with during the year. A shortage of suitable labour, in the summer and fall, left most of our bridge crews short handed and retarded the work to a considerable extent.

The reconstruction of the steel bridge over the Red Deer River at Hagen's Crossing, west of Olds, was completed and the bridge opened for traffic in March, 1916.

The new bridge consists of three 125'-spans on concrete piers and abutments with two 50'-timber trusses and nine 20'-spans on pile substructure. In addition to the bridge itself there are 2000' of bank protection work at this place. This consists of piles, driven, capped and sheeted and filled with rock and brush.

The 80' steel span that was washed down the Saskatchewan from the Clearwater above Rocky Mountain House in June, 1915, was salvaged and shipped to Edmonton, where it was repaired and erected, on pile substructure, on the Sturgeon River west of Namao.

A 100 ft. pony truss with a 16' approach on each end was erected on pile substructure over the Battle River north of Hardisty.

One 125' span was erected on pile substructure over the Battle River north of Castor.

One 125' span was erected on concrete abutments over Willow Creek west of Claresholm.

Abutments for a 200' span were completed for a bridge over the Old Man River north of Cowley. Steel work will be completed and bridge opened for traffic in the early part of the following year.

Pile substructure for bridge over Pembina River west of Westlock was completed. The bridge is to consist of two 135' and one 60' steel spans, and will be erected and bridge opened for traffic early in the following year.

One 100' span was ordered and shipped to Warner for a bridge over Milk River. No construction work was done in 1916.

One 125' span was ordered and shipped for a bridge over Milk River south of Foremost. No construction work was done in 1916.

One 125' span salvaged from the bridge over Red Deer River west of Bowden was shipped to Swan River for the construction of a bridge over the Swan River on pile substructure. No construction work was done in 1916.

The 100' span over Little Red Deer River west of Innisfail, which was damaged by ice, was repaired and raised 4 ft.

Two reinforced concrete culverts 8'x10'x30' long, were built to replace old timber spans, on the 14th base line east of Edmonton, one over Fulton Creek and one over Oliver Creek.

Two reinforced concrete culverts 4'x6'x28' long were constructed to replace timber spans over ditch on correction line east of Fort Saskatchewan.

There were four new ferries built and installed during the season. There were also seven new scows built for ferries already operated. The total number of Government Ferries now operating in the province is 71; 69 of these are operated by the Department and 2 are operated locally.

A full list of all the work undertaken by the Highways Branch is appended hereto.

Your obedient servant,

J. D. ROBERTSON,

Engineer of Highways.

Edmonton, Alta., Feb. 2nd., 1917.

BRIDGES.

STREAM	LOCATION	SIZE AND CLASS OF BRIDGE
Arrowwood Creek	33-20-23-4	One 20 ft. span on piles.
Arnolds Creek	11/12-35-1-5	Repairs.
Angling Creek	W. 19-60-20-4	Two 18 ft. spans on piles.
Battle River	35-48-3-4	Repairs.
Battle River	E. 12-45-on 4	Repairs.
Bow River	14-19-18-4	Repairs.
Beaver River	13-66-14-4	One 18 ft. span on cribs.
Boundary Creek	23-1-26-4	Reconstruction.
Belly River	12-3-28-4	Repairs.
Belly River	5-5-26-4	Repairs.
Beaverdam Creek	21/22-28-3-5	Two 20 ft. spans on piles.
Beddington Creek	22/27-27-2-5	Two 20 ft. spans on piles.
Beaverdam Creek	N.W. 12-28-3-5	One 16 ft. span on piles.
Beaverdam Creek	11/14-28-3-5	One 16 ft. span on piles.
Battle River	17-44-19-4	Repairs.
Backwater at Atha- basca River	Edson, Grande Prairie Trail	Repairs.
Berry Creek	35/1, 30/31-12-4	Two 20 ft. spans on piles.
Berry Creek	24/25-30-12-4	Two 20 ft. spans on piles.
Berry Creek	31-29-11-4	Two 20 ft. spans on piles.
Berry Creek	21/28-23-11-4	Two 20 ft. spans on piles.
Berry Creek	13/14-24-13-4	Three 20 ft. spans on piles.
Berry Creek	26/27-22-13-4	Three 20 ft. spans on piles.
Berry Creek	17/18-28-11-4	Three 20 ft. and one 18 ft. spans on piles.
Bull Pound	31-30-14-4	One 18 ft. span on piles.
Bull Pound	N. 10-31-14-4	Repairs.
Beaver Creek	7/8-36-6-4	Two 18 ft. spans on piles.
Buffalo Creek	5/31, 34/35-28-4	One 20 ft. span on piles.
Branch of Wolf Creek	1/2-41-27-4	Reconstruction.
Blackmud River	11/12-50-24-4	Repairs.
Belly River at	Lethbridge	Repairs.
Bull Head Creek	S.E. 16-12-5-4	Repairs.
Backfat Creek	N.E. 4-6-27-4	One 16 ft. span on piles.
Belly River at	Standoff	Repairs.
Bearberry Creek	4-33-6-5	50 ft. timber truss and one 18 ft. span on piles.
Battle River C. & E. Trail	4-43-25-4	Repairs.
Bear Creek	23-71-6-6	Repairs.
Benjamin Creek	31-19-4	Repairs.
Battle River	17-44-8-4	One 100 ft. steel span and two 16 ft. spans on piles.
Battle River	N. 31-42-9-4	Repairs.
Big Slough	24-38-28-4	Repairs.
Beaver River	25-62-6-4	Reconstruction.
Battle River	4-40-14-4	One 125 ft. steel span on piles.
Belly River	12-10-17-4	Repairs.
Birk Creek	14/15-50-10-4	Reconstruction.
Beaver Creek	W. 31-53-17-4	Three 20 ft. spans on piles.
Beaver Creek	6-55-18-4	Three 20 ft. spans on piles.
Battle River	25-45-23-4	Repairs.
Bigstone Creek	N.E. 7-46-25-4	Reconstruction.
Bow River	14-19-18-4	Repairs.
Creek	28/29-25-7-4	One 16 ft. frame bent.
Creek	15-66-24-4	24 ft. bridge on abutments.
Creek	19-23-20-4	One 16 ft. span on piles.
Crowfoot Creek	17-23-20-4	Three 20 ft. spans on piles.
Creek	S. 2-23-21-4	Repairs.
Creek	30/31-62-10-4	24 ft. span on cribs.
Creek	16/17-62-10-4	One 16 ft. span on cribs
Creek	W. 29-35-10-4	One 16 ft. frame bent.

STREAM	LOCATION	SIZE AND CLASS OF BRIDGE
Creek	7/8-33-10-4	One 18 ft. frame bridge.
Creek	32/33-35-4-4	One 16 ft. frame bent.
Creek	N.W. 8-33-3-4	One 16 ft. frame bent.
Creek	S. 3-36-10-4	One 16 ft. frame bent.
Creek	W. 19-37-10-4	Reconstruction.
Creek	W. 31-1-23-4	One 16 ft. frame bridge.
Coulee	13-3-28-4	Repairs.
Canal	3/33-4/5-23-4	Repairs.
Creek	3/4-3-26-4	Repairs.
Canal	6-5-22-4	Repairs.
Creek	N. 12-3-27-4	Repairs.
Coulee	29/30-5-20-4	Repairs.
Creek	25/30-5-20/21-4	Repairs.
Canal	2/3-5-23-4	Repairs.
Creek	S.E. 2-11/29-4	Grading.
Creek	S.E. 33-10-29-4	Grading.
Creek	22/23-27-1-5	Two 18 ft. spans on piles.
Creek	S.W. 21-27-1-5	One 20 ft. span on piles.
Creek	15/16-27-1-5	One 20 ft. span bridge.
Creek	19/30-27-1-5	One 12 ft. span.
Creek	8/9/27-1-5	One 16 ft. span on piles.
Creek	S.W. 28-28-3-5	One 20 ft. span on piles.
Creek	N. 11-28-3-5	One 16 ft. span on piles.
Creek	10/15-28-1-5	One 16 ft. span on piles.
Creek	22/23-28-1-5	One 16 ft. span on piles.
Creek	11-27-1-5	One 20 ft. span on piles.
Creek	8/17-27-1-5	One 16 ft. span on piles.
Creek	S. 26-50-20-4	One 14 ft. pile span.
Creek	W. 26-50-20-4	One 14 ft. pile span.
Creek	20/21-47-20-4	One 16 ft. span on piles.
Creek	S. 3-49-21-4	One 14 ft. span on piles.
Creek	W. 10-43-18-4	One 14 ft. span on piles.
Crooked Creek	15/16-30-3-5	One 20 ft. span on piles.
Creek	36-31-22-4	One 20 ft. span on piles.
Creek	13/14-31-27-4	Two 20 ft. spans on piles.
Carstairs Creek	33/34-29-1-5	One 20 ft. pile span.
Creek	S. 4-53-22-4	Reconstruction.
Creek	20-51-24-4	Repairs.
Carrot Creek	28/33-53-15-5	One 40 ft. timber truss.
Cow Creek	30-56-14-5	One 28 ft. span on piles.
Creek	9/10-57-14-5	20 ft. log bridge.
Creek	24/25-74-17-5	Repairs.
Creek	19/20-74-16-5	Repairs.
Creek near St. Bruno's Mission	8-74-13-5	Two 18 ft. spans on piles.
Creek	79-13-5	Two 18 ft. spans on cribs.
Cross Cut Creek	79-13-5	Two 20 ft. spans on cribs.
Crossfield Creek	7/18-27-26-4	Two 20 ft. spans on piles.
Creek	E. 36-33-18-4	One 18 ft. span on piles.
Creek	17-29-13-4	One 16 ft. span on piles.
Creek	E. 27-30-14-4	One 16 ft. span on piles.
Creek	2/3-24-11-4	One 20 ft. span on piles.
Creek	27/28-23-11-4	Two 20 ft. spans on piles.
Creek	E. 2-31-13-4	Two 20 ft. spans on piles.
Creek	21-35-3-5	One 20 ft. span on piles.
Creek	10/11-35-1-5	One 16 ft. span on piles.
Creek	S. 4-35-28-4	One 14 ft. span on piles.
Creek	8/17-36-1-5	Repairs.
Creek	16/17-40-26-4	One 16 ft. span on piles.
Creek	8/9-40-26-4	One 16 ft. span on piles.
Coulee	31-38-23-4	Repairs.
Creek	15/22-39-26-4	Repairs.
Creek	23-40-28-4	One 12 ft. pile span.
Creek	8/17-50-25-4	One 20 ft. span on piles.
Conjuring Creek	24/25-50-27-4	Two 20 ft. spans on piles.
Creek	4/5-50-26-4	One 20 ft. span on piles.

DEPARTMENT OF PUBLIC WORKS

STREAM	LOCATION	SIZE AND CLASS OF BRIDGE
Creek	16/17-50-23-4	Repairs.
Creek	N. 9-50-23-4	Repairs.
Creek	16/17-50-24-4	Repairs.
Creek	24/25-50-26-4	Repairs.
Conjuring Creek	1/36-48/49-27-4	Repairs.
Creek	21/22-49-24-4	Repairs.
Creek	34/35-54-7-5	One 18 ft. span on piles.
Creek	N.E. 30-9-21-4	Four 12 ft. spans on piles.
Creek	35/36-8-7-4	One 12 ft. frame bent.
Creek	N. 11-1-6-4	One 12 ft. frame bent.
Catchem Creek	9/10-4-5-4	Two 16 ft. spans on piles.
Coulee	10-6-6-4	One 12 ft. frame bent.
Catchem Creek	30/25-4-6/7-4	Two 20 ft. spans on piles.
Creek	N.E. 5-7-25-4	One 16 ft. span on piles.
Creek	24/25-7-25-4	One 16 ft. span on piles.
Coulee	8-8-25-4	Reconstruction.
Coulee	15/16-10-24-4	Repairs.
Coulee	34/35-6-26-4	One 16 ft. span on piles.
Coulee	17/18-8-25-4	Repairs.
Coulee	25/30-16-26/27-4	One 18 ft. span on piles.
Creek	N. 36-22-3-5	One 16 ft. span on piles.
Creek	35-20-1-5	Reconstruction.
Calgary Irrigation Co.'s Ditch	Calgary-Millarville Trail	Reconstruction.
Creek	23/26-32-28-4	Two 18 ft. spans on piles.
Creek	3/4-33-5-5	Repairs.
Creek	11/12-34-1-5	One 16 ft. span on piles.
Creek	33/34-32/33-27-4	Repairs.
Coulee	10/15-6-30-4	Reconstruction.
Creek	23/6-30-4	Reconstruction.
Creek Chipman	19/30-6-29-4	Reconstruction.
Coulee	15/16-7-29-4	Reconstruction.
Coulee	29/30-7-29-4	Reconstruction.
Coulee	20/29-7-29-4	Reconstruction.
Coulee	3/4-7-1-5	Reconstruction.
Creek	N. 36-42-28-4	One 20 ft. span on piles.
Creek	W. 24-42-3-5	One 16 ft. span on piles.
Creek	N. 24-42-3-5	One 16 ft. span on piles.
Creek	27/28-44-2-5	One 16 ft. span on piles.
Creek	S. 22-44-28-4	One 16 ft. span on piles.
Creek	12/13-42-28-4	One 16 ft. span on piles.
Creek	15/16-44-2-5	One 16 ft. span on piles.
Creek	12-42-28-4	One 16 ft. span on piles.
Creek	18-43-1-5	One 16 ft. span on piles.
Creek	W. 21-44-1-5	One 16 ft. span on piles.
Coyote Creek	3/4-57-5-5	One 22 ft. frame bent.
Coulee	23-57-5-5	Five 18 ft. spans on piles.
Creek	8-60-1-5	One 20 ft. frame bent.
Creek	22-57-5-5	Two 18 ft. spans on piles.
Creek	25/26-70-25-4	One 20 ft. span on piles.
Creek	12/13-70-25-4	One 20 ft. span on piles.
Creek	S. 6-59-27-4	One 16 ft. frame bent.
Creek	N. 32-57-2-5	One 16 ft. frame bent.
Creek	S.W. 30-81-3-6	One 40 ft. dam and bridge.
Creek	7/8-81-3-6	Two 16 ft. spans on piles.
Creek	S. 6-81-3-6	One 40 ft. dam and bridge.
Creek	Tp. 81-8/9-5	Repairs.
Creek	N.W. 26-13-6-4	Repairs.
Creek	28/29-13-6-4	Repairs.
Creek	16-39-1-4	Repairs.
Crow's Nest River	S.E. 9-8-5-5	Five 20 ft. spans on piles.
Crow's Nest River	3/36-7-4-5	Repairs.
Crow's Nest River	3-8-4-5	Repairs.

STREAM	LOCATION	SIZE AND CLASS OF BRIDGE
Clearwater River	9/10-39-7-5	One 80 ft. and one 125 ft. steel spans, four 20 ft. spans on piles.
Coulee	9-39-7-5	One 20 ft. and one 16 ft. spans on piles.
Creek	28-39-4-5	One 18 ft. span on piles.
Creek	2-55-1-4	One 18 ft. span on piles.
Creek	N.E. 11-55-2-4	Two 16 ft. spans on piles.
Creek	S.W. 10-61-6-4	One 18 ft. span on piles.
Creek	6-58-3-4	Two 16 ft. spans on piles.
Creek	In 31-61-3-4	One 20 ft. span on cribs.
Creek	In 27-61-4-4	Three 16 ft. spans and frame bents, round timber abutments.
Creek	W. 30-56-3-4	One 16 ft. span on piles.
Creek	19/30-36-20-4	One 18 ft. span on piles.
Creek	29/30-36-20-4	Two 16 ft. spans on piles.
Creek	S.W. 32-35-20-4	One 18 ft. span on piles.
Creek	26/27-34-20-4	One 18 ft. span on piles.
Creek	In N.E. 36-37-17-4	One 10 ft. frame subway.
Creek	N.W. 33-52-27-4	One 14 ft. frame bent.
Creek	22/23-46-14-4	One 10 ft. frame bent.
Creek	20/21-59-22-4	Three 18 ft. spans round timber.
Creek	27/28-58-25-4	Two 16 ft. spans on piles.
Creek	25/30-58-25/26-4	Two 16 ft. spans on piles.
Creek	20/29-56-26-4	One 16 ft. span on cribs.
Creek	10/15-57-27-4	One 14 ft. span on cribs.
Carrot Creek	12/13-54-26-4	Reconstruction.
Creek	15/36-9-15-4	One 18 ft. frame bent.
Creek	S. 5-6-20-4	Repairs.
Creek	32-6-20-4	Repairs.
Creek	21/22-6-20-4	Repairs.
Creek	3-10-17-4	Repairs.
Creek	9/16-6-20-4	Repairs.
Creek	10/15-6-22-4	Repairs.
Chin Coulee		Repairs.
Creek	33/34-13-20-4	Repairs.
Canal	32-6-19-4	Repairs.
Creek	3/1-50-6	Repairs.
Creek	35/36-54-16-4	One 16 ft. span on piles.
Creek	17/18-53-15-4	One 16 ft. span on mud sills.
Creek	3/4-51-17-4	One 16 ft. span on mud sills.
Creek	N. 20-52-14-4	Reconstruction.
Creek	34/2-54/55-22-4	6 ft. x 6 ft. reinforced box culvert.
Creek	31-51-16-4	Repairs.
Creek	N. 34-54-22-4	Repairs.
Creek	21-54-22-4	Repairs.
Creek East of Fort Saskatchewan	34/3-54/55-22-4	Reconstruction.
Creek	N.E. 34-54-22-4	Reconstruction.
Creek	19/30-45-5-4	Five 20 ft. spans on piles.
Creek	9/10-5-17-4	One 16 ft. span on piles.
Creek	13-3-11-4	One 14 ft. span on piles.
Creek	S. 6-4-17-4	One 20 ft. span on posts.
Creek	7/18-1-13-4	Repairs.
Creek	N. 36-54-16-4	One 16 ft. span on piles.
Creek	32/33-46-26-4	Three 20 ft. spans on piles.
Creek	11/12-46-3-5	One 20 ft. span on piles.
Creek	13/14-46-3-5	One 12 ft. frame bent.
Creek	19/30-45-26-4	One 18 ft. span on piles.
Creek	N. 18-45-26-4	One 20 ft. span on piles.
Creek	W. 12-46-26-4	One 18 ft. span on piles.
Creek	25/26-46-25-4	Two 18 ft. and 1 20 ft. spans on piles.

DEPARTMENT OF PUBLIC WORKS

STREAM	LOCATION	SIZE AND CLASS OF BRIDGE
Creek	1 2-45-1-5	Two 12 ft. piles spans
Creek	20 21-47-3-5	One 20 ft. span on cribs.
Creek	8/17-45-27-4	12½ ft. span on piles.
Creek	W 10-45-26-4	One 20 ft. span on piles.
Creek	15/16-47-3-5	Repairs.
Creek	12/13-46-27-4	Repairs.
Creek	24/25-46-23-4	Repairs.
Creek	15 67-24-4	One 20 ft. span on abutments.
Creek	N. 34-50-9-4	Repairs.
Dried Meat Creek	16/17-45-18-4	Reconstruction.
Deep Creek	32 74-16-5	One 16 ft. span on piles.
Ditch	6-19-28-4	Repairs.
Ditch	27/28-41-26-4	Repairs.
Deep Creek	N. 25 71-5-6	Three 18 ft. spans on piles.
Deep Coulee	26/27-56-5-4	Reconstruction.
Dog Rump Creek	18-57-7-4	Reconstruction.
Elbow River	4/5-24-2-5	Protection work.
Eight Mile Creek	N. 28-49-26-4	Two 20 ft. spans on piles.
Elbow River	23-2-5	Repairs.
Elbow River	12-23-5-5	Repairs.
Emberly Creek	S. 6-39-4-5	One 16 ft. span on piles.
Egg Lake Creek	27/28-56-25-4	Reconstruction.
Foot of Bald Hill	Athabasca-Peace River Trail	Repairs.
Flat Creek	31/5-66/67-19-4	Reconstruction.
Fallen Timber Creek	34-31-5-5	Repairs.
Fulton Creek	N.E. 36-52-24-4	8 ft. x 10 ft. reinforced concrete culvert.
Fish Creek	S.E. 1-23-3-5	60 ft. T.T. on crib abutments.
Fish Creek	4-33-1-5	Repairs.
Foothill Creek	11/12-5-29-4	Repairs.
French Creek	S.E. 16-64-1-5	60 ft. span.
Five Mile Creek	E. 26-71-5-6	One 20 ft. span on piles.
Flat Creek	N. 35-64-20-4	Three 18 ft. spans round timber.
Ghost River	13-26-6-5	Repairs.
Hangstone Creek	N.E. 9-89-9-4	50 ft. timber truss.
Hay Creek	S.E. 31-65-13-4	One 20 ft. span on cribs.
Horse Creek	32/5-26/27-4-5	Repairs.
Horse Creek	7/18-27-4-5	Repairs.
Horse Creek	5-27-4-5	Repairs.
High River at	High River	Removing old bridge.
Horseguard Creek	S. 6-40-5-5	Two 14 ft. spans on piles.
Haynes Creek	2/3-39-24-4	Repairs.
High River	18/7-20-28-4	Repairs.
Hay Creek	15/16-59-25-4	One 20 ft. span on mud sills.
Hart River at	Peace River Crossing	Repairs.
Horseguard River	21/22-39-5-5	Five 16 ft. spans on piles.
Horseguard Creek	29/32-39-5-5	Repairs.
High River at	High River	Repairs to dam.
Hudson Bay Creek	N. 29-49-27-4	Repairs.
Irish Creek	S. 6-54-3-4	Three 20 ft. pile bents.
Irish Creek	14-54-4-4	One 16 ft. span on piles.
Irvine Creek	2-51-24-4	Repairs.
Iron Creek	N. 16-43-9-4	Three 20 ft. spans on piles.
Iron Creek	W. 19-44-10-4	Three 20 ft. spans on piles.
Iron Creek	E. 13-43-10-4	Repairs.
Iron Creek	17-43-9-4	Repairs.
Iron Creek	7-46-13-4	Three 20 ft. spans on piles.
January Creek	16-54-15-5	Repairs.
James River	W. 14-34-5-5	Reconstruction.
Kneehill Creek	25 30 25 26-4	Three 20 ft. spans on piles.
Kneehill Creek	14/15-29-23-4	Reconstruction.
Kneehill Creek	15-29-23-4	Reconstruction.
Kneehill Creek	N.E. 15-29-23-4	Reconstruction.

STREAM	LOCATION	SIZE AND CLASS OF BRIDGE
Kneehill Creek	S.W. 13-29-23-4	Reconstruction.
Kneehill Creek	9/10-30-25-4	Reconstruction.
Kneehill Creek	17/20-30-25-4	Reconstruction.
Kneehill Creek	35-29-25-4	Repairs.
Kneehill Creek	29-29-24-4	Reconstruction.
Kipp Coulee	8/17-6-19-4	Repairs.
Lees Creek	36-2-26-4	Repairs.
Lees Creek 'Branch'	12-2-27-4	Reconstruction.
Lees Creek	9/10-3-25-4	Repairs.
Layton Coulee	13-3-26-4	Repairs.
Little Red Deer River	29-29-5-5	Reconstruction.
Lone Pine Creek	7 12-31-26 27-4	Three 20 ft. spans on piles.
Lone Pine Creek	12/13-31-27-4	Reconstruction.
Lobstick River	20-54-12-5	One 40 ft. T.T. and one 20 ft. span on piles.
Lesser Slave River	S.W. 7-73-5-5	Repairs.
Little Red Deer River	19/30-35-1-5	Repairs.
Little Bow River	18-17-26-4	Repairs.
Little Red Deer River	9/16-35-2-5	Repairs.
Little Bow River	31-13-23-4	Repairs.
Little Bow River	5-15-21-4	Repairs.
Little Weed Creek	5-49-1-5	One 20 ft. span on piles.
Leduc Creek	N.E. 27-49-25-4	Repairs.
Lobstick River	W. 6-54-10-5	One 60 ft. T.T. and two 20 ft. spans on piles.
Lost River Creek	1/6-4-6/7-4	One 16 ft. span on piles.
Lodge Creek	N.W. 9-7-3-4	Repairs.
Little Plume Creek	S.W. 29-9-4-4	Reconstruction.
Lachance Coulee	25/30-8-24/25-4	Five 20 ft. spans on piles.
Little Bow River	11/14-14-25-4	Repairs.
Little Bow River	N. 31-14-25-4	Repairs.
Little Bow River	12/13-15-26-4	Repairs.
Little Burnt River	25/26-81-2-6	Two 18 ft. spans on piles.
Last Hill Creek	20-39-5-5	Five 16 ft. spans on piles.
Last Hill Creek	7/18-39-4-5	Repairs.
Last Hill Creek	12/13-39-5-5	Repairs.
Last Hill Creek	27/28-39-4-5	Repairs.
Last Hill Creek	15/16-39-3-5	Repairs.
Little Sucker Creek	14/15-60-22-4	Three 18 ft. spans on piles.
Little Egg Creek	16/17-55-24-4	Two 16 ft. spans on piles.
Little Vermillion River	6/36-58/59-24/25-4	Repairs.
Little Vermillion River	5/6-59-24-4	Repairs.
Little Bow River	10-11-19-4	Repairs.
Little Bow River	30-12-19-4	Repairs.
Muskeg Creek	15-54-16-5	One 50 ft. T.T. and one 20 ft. span on piles.
Moose Creek	Road to Lesser Slave Lake	Repairs.
Medicine River	N. 2-41-4-5	Repairs.
Manyberries Creek	S. 15-6-5-4	Two 16 ft. spans on piles.
Manyberries Creek	S.W. 19-5-5-4	Two 20 ft. spans on piles.
Manyberries Creek	31-4-6-4	Repairs.
Medicine Lodge Coulee	12-8-4-4	Repairs.
Mosquito Creek	S.E. 34-15-27-4	One 40 ft. pile trestle and two 20 ft. spans on piles.
Mosquito Creek	25/36-16-30-4	One 20 ft. and two 16 ft. spans on piles.
Mosquito Creek	7/18-15-26-4	Repairs.
Mosquito Creek	29/30-16-28-4	Repairs.
Medicine River	5-43-4-5	Two 20 ft. spans on piles.
Medicine River	W. 24-38-3-5	Two 50 ft., two 18 ft., one 12 ft. spans on piles.
Medicine River	7-38-2-5	Two 50 ft. frame and two 18 ft. and one 16 ft. spans on piles.
Moose Creek	10-57-5-4	One 20 ft. span on piles.

DEPARTMENT OF PUBLIC WORKS

STREAM	LOCATION	SIZE AND CLASS OF BRIDGE
Meeting Creek	S.E. 29-41-17-4	Repairs.
Milk River	36-1-13-4	Repairs.
Muskeg Creek	4-45-28-4	One 20 ft. span on piles.
Narrows of Lesser Slave Lake	At Grouard	Repairs.
N. Paddle River	21/22-57-7-5	Three 18 ft. spans on piles.
Old Man River	8/9-16/17-9-5	200 ft. steel span on concrete.
Oliver Creek	33/35-52-24-4	8 ft. x 10 ft. reinforced con- crete culvert.
Old Man River	10-9-26-4	Repairs.
Overflow Channel	W 1/2 13-9-26-4	Repairs.
Old Man River	13-9-26-4	Repairs.
Oxley Creek	7/18-14-28-4	20 ft. standard pile trestle.
Old Man River	At Brocket	Reconstruction.
Pine Creek	26/27-66-20-4	24 ft. span on abutments.
Parflesh Creek	34-23-21-4	Repairs.
Paint Earth Creek	4-40-13-4	Three 18 ft. spans on piles.
Point aux Pins	36-52-23-4	Reconstruction.
Point le Pied Creek	31-53-23-4	Reconstruction.
Point aux Pins	10/15-53-22-4	Repairs.
Pugsley Creek	25-53-16-5	Log bridge.
Paddle River	15/16-57-7-5	One 50 ft. T.T. and one 20 ft. span on piles.
Paddle River	W. 31-57-8-5	Repairs.
Paddle River	W. 6-57-7-5	One 50 ft. T.T. and one 20 ft. span on piles.
Paddle River	27/28-56-9-5	Three 20 ft. spans on piles.
Pendant d' Oreille	22/27-3-7-4	One 16 ft. span on piles.
Paint Earth Creek	16/17-40-16-4	One 20 ft. span on piles.
Pines Creek	S.E. 3-65-21-4	Repairs.
Pothole Coulee	7/18-6-21-4	Repairs.
Pakan Trail	6-58-16-4	Repairs.
Police Coulee	1-1-13-4	Repairs.
Pipestone Creek	2/3-47-23-4	Two 16 ft. and two 20 ft. spans on piles.
Pipestone Creek	21-47-24-4	Repairs.
Poplar Creek	S. 3-47-4-5	Repairs.
Rat Creek	W. 19-51-21-4	One 16 ft. span on piles.
Rosebud Creek	7-27-21-4	Repairs.
Rosebud Creek	10-27-22-4	Repairs.
Rosebud Creek	29-27-20-4	Repairs.
Rosebud Creek	22/23-27-23-4	Repairs.
Ribstone Creek	16-37-9-4	One 16 ft. and one 18 ft. frame bent.
Rolph Creek	29-2-24-4	Repairs.
Rapp Slough	25-56-15-5	One 24 ft. span on piles.
Rosebud River	16/17-27-22-4	Three 20 ft. spans on piles.
Rosebud River	20/21-27-23-4	Three 20 ft. spans on piles.
Rosebud River	10-27-22-4	Repairs.
Rosebud River	11/12-27-22-4	Repairs.
Raven River	15/16-36-6-5	Two 18 ft. spans on piles.
Raven River	8/9-26-1-5	Repairs.
Red Deer River	8-35-3-5	Repairs.
Red Deer River	36-28-4	Repairs.
Ross Creek	23-12-5-4	Repairs.
Red Deer River	3/34-32/33-5-5	Bank protection.
Red Deer River	S.W. 3-33-5-5	Reconstruction.
Red Deer River	N. 36-33-5-5	Reconstruction.
Red Deer River	33-38-22-4	Repairs.
Red Willow Creek	32-40-17-4	Two 18 ft. spans on piles.
Red Water River	3/4-59-23-4	50 ft. timber truss.
Red Water River	15/16-58-22-4	Repairs.
Riviere Qui Barre	23/26-55-27-4	Two 20 ft. spans on piles.
Ribstone Creek	9/16-44-5-4	Repairs.
Sounding Creek	7-34-3-4	One 16 ft. frame bent.
Sounding Creek	5/6-34-3-4	One 16 ft. frame bent.

STREAM	LOCATION	SIZE AND CLASS OF BRIDGE
Snake Creek	14/23-2-25-4	Reconstruction.
St. Mary's River	Near mouth of Lees Creek	Repairs.
St. Mary's River	1-2-25-4	Repairs.
Sheep Coulee	11/14-30-1-5	One 20 ft. span on piles.
Salt Creek	76-14-5	Repairs.
Serviceberry Creek	W. 19-25-24-4	One 20 ft. and one 11 ft. span on piles.
Slough	18-25-24-4	Five 20 ft. spans on piles.
Sturgeon River	E. 1-55-1-5	Repairs.
Six Mile Coulee	16-8-21-4	Rental.
Seven Persons Creek	12/13-10-7-4	Two 16 ft. spans on piles.
Seven Persons Creek	N. 20-10-7-4	Repairs.
Seven Persons Creek	N. 23-10-7-4	Repairs.
Seven Persons Creek	32/33-11-6-4	Repairs.
Seven Persons Creek	33/34-11-6-4	Repairs.
Sheep Creek	At Okotoks	Repairs.
Six Mile Coulee	Calgary-Millarville Trail	Reconstruction.
Spirit River	Sett. to Dunvegan	Four 20 ft. spans on piles.
Spirit River	Bet. R. L.'s 43/45	Repairs.
Swamp Creek	Road Spirit River to Grande Prairie	Reconstruction.
St. Germain's Creek	19-83-21-5	Repairs.
Stockwell Creek	N. 36-38-5-5	One 20 ft. span on piles.
Sucker Creek	W. 31-38-21-4	One 16 ft. span on piles.
Sturgeon River	10-55-24-4	Repairs.
Sturgeon River	36/6-54/55-24/25-5	One 80 ft. timber truss.
Sucker Creek	23-58-20-4	Reconstruction.
Sturgeon River	33/3-54/55-27-4	Three 20 ft. spans on piles.
Sturgeon River	R.L. 60/61-54-25-4	Grading.
Strawberry Creek	36-48-2-5	Repairs.
Tawatinaw Creek	Near Athabasca	Repairs.
Trout Creek	28/29-54-15-5	One 40 ft. T.T. and one 20 ft. pile span.
Trembly Creek	23-54-15-5	One 16 ft. span on piles.
Three Hills Creek	6/36-34/35-25-26-4	Repairs.
Twelve Mile Coulee	16-8-21-4	Rental.
Tail Creek	2/34-38/39-22-4	Reconstruction.
Tawatinaw River	24-62-24-4	Repairs.
Tawatinaw River	On Edmonton-Athabas- ca Road	Reconstruction.
Vermilion River	N. 32-52-3-4	Three 20 ft. spans on piles.
Vermilion River	11/14-52-4-4	Four 18 ft. spans on piles.
Vermilion River	33/34-51-4-4	40 ft. pile truss.
Vermilion River	11-54-3-4	Repairs.
Vermilion River	1/2-52-5-4	Repairs.
Vermilion River	1-57-21-4	Reconstruction.
Vermilion River	28/29-58-25-4	Reconstruction.
Vermilion River	21-51-9-4	Repairs.
Vermilion River	19-52-14-4	One 16 ft. span on piles.
Vermilion River	24-51-15-4	Repairs.
Vermilion River	3/34-54/53-14-4	Repairs.
Vermilion River	14/15-53-14-4	Repairs.
Vermilion River	36/1-51/52-15-4-5	Reconstruction.
Vermilion River	31/32-54-12-4	Eight 20 ft. spans on piles.
Willow Creek	N.E. 23-12-28-4	One 125 ft. steel span.
Willow Creek	32-13-28-4	Repairs.
Whitemud Creek	24/25-51-25-4	Repairs.
Weden Creek	20-53-15-5	Log bridge.
Whitemud Creek	7/18-48-25-4	Two 20 ft. spans on piles.
Weed Creek	35/26-49-28-4	Repairs.
Wolf Creek	8/9-42-26-4	One 18 ft. span on piles.
Wolf Creek	8/17-42-26-4	Reconstruction.
West Branch of Medi- cine River	9/10-42-5-5	Two 16 ft. spans on piles.

DEPARTMENT OF PUBLIC WORKS

STREAM	LOCATION	SIZE AND CLASS OF BRIDGE
Waskasoo Creek	9/16-38-27-4	Repairs.
Willow Creek	12/13-44-13-4	Reconstruction.
Wahsahtanon Creek ..	33-58-19-4	Reconstruction.
Yelling Creek	12-60-8-4	Repairs.
Total wooden built		296
Total steel built		3
		299
Repaired		179
Total dealt with		478

FERRIES.

The total number of ferries operated by this Department in 1916 was 69.

There were two ferries operated by the public as follows:

1. On the Old Man River north of Purple Springs.
2. On the Bow River south of Bassano.

Making 71 government owned ferries in the province.

New ferries were built and installed on the following locations:

1. Red Deer River north of Atlee.
2. South Saskatchewan River on Fourth Meridian.
3. North Saskatchewan River south of Tomahawk.
4. Peace River at Fort Vermilion.

New scows were built in connection with the following ferries:

1. Red Deer River north of Bindloss.
2. Red Deer River at Fieldholm.
3. Red Deer River at Steeveville.
4. Bow River south of Strathmore.
5. North Saskatchewan River at Desjarlais.
6. North Saskatchewan River at Victoria.
7. North Saskatchewan River at Hopkins' Crossing.

The ferry on the Big Smoky River at Goodwin's Crossing was brought up and installed at Bezanson's Crossing, and operated during the season at that point. The ferries at Garrington's Crossing on the Red Deer River and west of McLennan on the Big Smoky were discontinued.

Auxiliary power was installed on the ferry over the Peace River at Peace River Crossing to enable the ferry to operate during low water and under other adverse conditions.

The result was highly satisfactory and enabled the ferry to successfully handle the heavy traffic at that point.

The following is a complete list of ferries in the Province at the close of the season of 1916:

1. Red Deer River north of Bindloss.
2. North Saskatchewan River at Brosseau.
3. North Saskatchewan River at Desjarlais.
4. Athabasca River at Holmes' Crossing.
5. Bow River south of Cluny.
6. Red Deer River at Dorothy.
7. Old Man River at Summerview.
8. North Saskatchewan River at Victoria.
9. North Saskatchewan River at Fourth Meridian.
10. Athabasca River at Athabasca.
11. Red Deer River at Trochu.
12. North Saskatchewan River at Shandro.
13. Pembina River at Wild Horse.
14. North Saskatchewan River at Hopkins' Crossing.
15. Red Deer River at Fieldholm.
16. North Saskatchewan River at Rocky Mountain House.
17. Peace River at Peace River Crossing.

18. Lac Ste. Anne at the Narrows.
19. North Saskatchewan River north of Kitscoty.
20. North Saskatchewan River north of Lamont.
21. Pembina River at Sunieband.
22. Pembina River at Wright's Crossing.
23. North Saskatchewan River at Lamora's Landing.
24. Bow River south of Strathmore.
25. Peace River at Dunvegan.
26. South Saskatchewan River at Bow Island.
27. North Saskatchewan River north of Mannville.
28. Pembina River at Entwistle.
29. Red Deer River east of Carbon.
30. Red Deer River at Steeveville.
31. Bow River at Riverbow.
32. Beaver River at Cold Lake Crossing.
33. Old Man River north of Purple Springs.
34. Bow River at Rocky Buttes.
35. Red Deer River west of Munson.
36. North Saskatchewan River south of Tomahawk.
37. Red Deer River at Finnegan's Crossing.
38. Pembina River at Matthews' Crossing.
39. North Saskatchewan River at Mooswa.
40. Pembina River at Lunnford.
41. Baptiste River on Edson Trail.
42. Athabasca River on Edson Trail.
43. Little Smoky River on Edson Trail.
44. Bow River at Eyremore.
45. Macleod River north of Thornton.
46. Macleod River at Whitecourt.
47. Red Deer River at Dead Lodge Canyon.
48. Bow River at Kinnondale.
49. Beaver River north of Durlingville.
50. North Saskatchewan River north of Bruderheim.
51. Pembina River west of Hazel Bluff.
52. Pembina River at Manola.
53. Macleod River north of Peers.
54. Red Deer River north of Jenner.
55. Red Deer River at Gregory's Ford.
56. North Saskatchewan River at Elk Point.
57. Red Deer River at Emerson's Ford.
58. Red Deer River at Empress.
59. Pembina River north of Sangudo.
60. Red Deer River west of Morrin.
61. Pembina River at Eunice.
62. North Saskatchewan River at Heimsburg.
63. Peace River at Fort Vermilion.
64. Bow River south of Bassano.
65. Red Deer River north of Pancras.
66. Athabasca River at Hinton.
67. Macleod River north of Rosevear.
68. South Saskatchewan River on Fourth Meridian.
69. Red Deer River north of Atlee.
70. Red Deer River at Mountain House.
71. Big Smoky River at Bezanson's Crossing.

ORDINARY ROADS, 1916

Between Secs. 1/6 to 31/36-30-4/5-4. Cutting hill and grading.
 Between Secs. 3/4 to 33/34-30-4-4. Widening grade and cutting hill.
 East of Sec. 5 to 29-28-6-4. Cutting hill.
 West of Sec. 5 to 32-26/27-5-4. Cutting hill.
 On Sec. 16-22-4-4. Improvement of road.
 Road south of Lake Baptiste. Corduroy and improvement of road.
 On Secs. 5 to 32-67-21-4. Corduroy and improvement.
 On Tps. 66/67-22-4. Improvement of road.
 South of 16 and east of 17 to 20-67-22-4. Widening ditch and covering
 cord.

On the south $\frac{1}{2}$ 66-22-4. Repairing road.
 South of 13 and 24-68-22-4, 18 and 19-68-21-4. Improvement road.
 East of Secs. 6 to 31-67-23-4. Improvement road.
 Between Secs. 20/21-67-22-4. Grading.
 Through centre 4-41-2-5. Improvement of road.
 From S.W. 1-52-5-4 to Moose Ferry between Secs. 21-22-56-5-4. Improvement of road.
 On Sec. 6-52-1-4 and Blackfoot North. Improvement of road.
 North of 52-3-4. Improvement of road.
 Between Secs. 2/3-53-1-4. Improvement of road.
 Between Secs. 20/21-59-9-4. Improvement of road.
 Between Secs. 26/27-60-10-4. Corduroying.
 North of 10 and 11-60-10-4. Corduroying.
 Between Secs. 21/28-61-9-4, west to between Secs. 28/26-61-10-4. Corduroying and improvement of road.
 East of Secs. 15, 22, 27 and 34 north of 32, 33, 34-59-11-4. Corduroying road.
 North of Secs. 7 to 10-61-10-4. Corduroying road.
 East of Secs. 5 and 8, south of 17/18-65-12-4, south of 13, 14, 15-65-13-4. Opening road.
 North of Sec. 11-68-16-4. Corduroying muskeg.
 South and east 15-67-15-4. Improvement of road.
 South of Plamondville between 66/67-16-4. Repairing road.
 North of Tp. 66-15/16-4. Opening road.
 Between Secs. 27/28 and 33/34-65-15-4. Opening road.
 Between Secs. 13 to 36-65-15-4 through 12 and east 66-15-4. Clearing windfall.
 North of 8, 9, 10-59-12-4. Improvement of road.
 Between Secs. 2/3-61-10-4. Improvement of road.
 Between Secs. 8/9-60-9-4. Improvement of road.
 West of Secs. 16, 21, 28, 33-61-10-4. Opening and improvement of road.
 S.W. of Clarkeville between Tps. 58/59-11-4. Opening and improvement of road.
 West of Secs. 10, 15, 22, 27-58-10-4. Opening and improvement of road.
 Between Secs. 30/31-59-11-4 and between Secs. 35/36-59-12-4. Opening and improvement of road.
 Between Secs. 32/33-59-12-4. Opening and improvement of road.
 North and west 22-57-10-4. Opening and improvement of road.
 Between Secs. 9/16-58-10-4. Opening and improvement of road.
 North of Secs. 34 and 35-55-12-4. Opening and improvement of road.
 Between Secs. 29/30-59-9-4. Improving road.
 East of 28/33-59-17-4 and east 4, 9, 16-60-17-4. Opening road.
 N. and E. of 16 and east of 4 to 9-60-16-4. Opening road.
 East of Secs. 4, 9, 16-60-15-4 and south of Secs. 4, 5, 6-60-15-4. Opening road.
 North of Tp. 64-13-4. Improvement of road.
 West of Secs. 7/18-65-13-4. Improvement of road.
 Between Secs. 2/3-58-10-4. Improvement of road.
 Between Secs. 25/26, 35/36-66-16-4. Improvement of road.
 East of Secs. 1 to 25-62-11-4. Improvement of road.
 In Secs. 2, 3, 9, 10-68-16-4. Improvement of road.
 Between Secs. 15/16-68-16-4. Improvement of road.
 East and south of Sec. 32, west of N.W. 29-21-21-4. Repairing road.
 Kinnondale to Bassano Ferry, Tps. 17, 18, 19-18-4. Improvement of road.
 Between Secs. 20-29, 21/28, 28/29-22-21-4. Repairing road.
 Between Secs. 7/8-20-19-4. Improvement of road.
 Between Secs. 10/11-21-19-4. Repairing road.
 Between Secs. 9/16, 10/15, 11/14, 12/13-22-21-4. Improvement of road.
 Between Secs. 10/15-19-20-4. Improvement of road.
 To Ferry over Red Deer River S.E. 4-27-17-4. Improvement of road.
 West of Secs. 18/19-19-20-4. Grading culverts.
 Between Bassano, Rosemary and Duchess. Grading culverts.
 Between Secs. 31/32-21-20-4. Grading culverts.
 N.W. of Sec. 7-25-15-4. Improvement of road.
 Between Secs. 24/25-23-16-4. Improvement of road.
 Between Secs. 2/3-21-18-4. Improvement of road.
 West of Secs. 4 and 9-19-20-4. Improvement of road.
 Nose Creek Bush Trail, Tps. 25 to 28-1/2/3-5. Improvement of road.
 Calgary Beaver Dam 16-25-1-5. Improvement of road.
 Between Secs. 11/12, 13/14, 23/24-26-2-5. Culvert.
 West of Secs. 15-22-2 Tp. 25-2-5. Grading.

North of Tp. 25-3-5. Grading.
 Sarcee Camp between Secs. 1/2-34-2-5. Improvement of road.
 Between Secs. 26/27, 34/35-60-3-5. Grading and repairing road.
 E. and W. of Mellowdale 60-3/4-5. Improvement of road.
 East of Secs. 5 to 32-60-3-5. Grading road.
 Between Secs. 1/2-62-6-5. Cutting hill.
 Between Secs. 25/26, 35/36-58-3-5. Repairs to road.
 Between Secs. 21/28-62-6-5. Repairs to road.
 Between Secs. 2/3-34-6-4. Improvement of main road.
 Between Secs. 8/9-39-13-4. Improvement of road.
 S. of Fleet 35/36/37-13-4. Repairing road.
 Between Secs. 4/5-35-7-4. Repairing road.
 East Secs. 8 to 32-35-7-4 and east 5 to 32, 36-7-4. Repairing road.
 East of Secs. 17/20/29/32-35-6-4. Improvement of road.
 East of Secs. 1 and 12-35-7-4. Improvement of road.
 West of Secs. 31/34-38-4-4. Grading and culverts.
 In Tp. 34-10-4. Grading and culverts.
 West of Sec. 16-35-8-4. Improvement of road.
 East of Secs. 6 and 7-35-8-4. Improvement of road.
 Between Secs. 9/16, 10/15-35-8-4. Improvement of road.
 East of Secs. 24, 25, and 36-35-9-4. Grading road.
 In Tps. 33/34-3-4. Improvement of road.
 Between Secs. 14/15-36-6-4. Improvement of road.
 West 31/32-35-9-4. Grading road.
 Road north of Monitor. Grading road.
 Road east of 21-38-9-4. Improvement of road.
 Road north 22-38-9-4. Improvement of road.
 Steel bridge near Coldwell to Waterton Lake. Grading and improvement of road.
 West of Secs. 4, 9, 16, 21-28-4-23-4. Improvement of road.
 Road up Lee's Creek to Leavitt. Improvement of road and culverts.
 West of Secs. 19, 30, 31-1-25-4. Grading road.
 East of Secs. 5 to 32-5-20-4. Grading road.
 Between Secs. 17/18-5-20-4. Improvement of road.
 In Secs. 7/12, 18/13-5-20/21-4. Improvement of road.
 North of Secs. 27 to 30-5-22-4. Improvement of road.
 Cardston S. to Boundary Creek 8-2-25-4. Grading and improvement of road.
 Between Secs. 24/25-5-22-4. Grading and improvement of road.
 Between Secs. 22/23-5-22-4. Grading and improvement of road.
 Between Secs. 30/25-1-23/24-4. Improvement of road.
 In Tp. 2-23/24-4. Improvement of road.
 Road to steel bridge between Twps. 2/3-28/29-4. Improvement of road.
 From Mountain View to Timber. Improvement of road.
 Between Secs. 24/25-1-24-4. Grading and repair.
 In Secs. 10, 11, 14-1-27-4. Grading and repairs.
 Between Secs. 13/14-5-22-4. Improvement of road.
 Between Secs. 7/12-13/18-5-20/21-4. Improvement of road.
 Between Secs. 9/16, 10/15, 11-12-5-21-4. Improvement of road.
 East of Secs. 2, 11, 23, 26, 35-4-21-4. Improvement of road.
 N. Sec. 18-1-23-4, through 10 to 12, 15/17-1-23-4. Culvert and repairs.
 Between Secs. 12/13, 11/14-1-24-4. Culvert and repairs.
 Between Secs. 26/27-6-21-4. Culvert and repairs.
 East of Secs. 2 to 35-10-27-4. Subway.
 Star Line east of Claresholm, 12-25/26-4. Culvert and repairing road.
 North-west of Secs. 32-13-28-4. Culvert and repairing road.
 Road up Five Mile Creek 9-29-4. Improvement of road.
 From Secs. 19 to 24/21-10-28-4. Improvement of road.
 Between Secs. 3/4-9-29-4. Improvement of road.
 North of Secs. 1/6-11-28-4. Culverts and repairs.
 Between Secs. 14/15-11-28-4. Improvement of road.
 North of Sec. 36-11-28-4. Improvement of road.
 Between Secs. 15/16-12-28-4. Improvement of road.
 North of Secs. 34/35-29-4-5. Repairing road.
 North of Secs. 25 to 30-28-3/4/5-5. Improvement of road.
 Between Secs. 7/18-27-4-5. Grading.
 Between Secs. 12/13, 7/18-28-1/2-5. Improvement and culverts.
 East of Secs. 4 to 33-28-1-5. Improvement and culverts.
 In Section 25-28-29-4. Improvement of road.
 Between Secs. 34/35-28-1-5. Grading road.
 Calgary to Morleyville trail 26 to 28-4-5-5. Improvement of road.

Between Secs. 21/22-26-5-5. Raising grade.
 Between Secs. 34/3-27/26-5-5. Replacing two bridges and grading.
 Through Secs. 29/31-26-5-5. Improvement.
 South of Secs. 6, 1, 2-29-3/4-5. Grading and improvement of road.
 Morley Trail, N. and E. of Cochrane. Improvement.
 In Secs. 34/35, 26/27. 22/23-26-4-5. Improvement of road.
 Road Cochrane and Mitford, through Grand Valley to Dog Pound. Grading.
 North of Sec. 35/26-29-4. Culverts and repairs.
 N.E. Secs. 30, north of 29/28, west of N.W. 27, north of S½ 27-27-3-5.
 Improving.
 Nose Creek Bush Trail Tps. 25 to 28, Rg. 1, 2, 3-4. Grading.
 In Sec. 25-27-4/5-5. Improvement of road.
 Cochrane to Dog Pound up Horse Creek. Grading.
 In Secs. 13/24 to 17/30-28-4-5. Improvement.
 N.E. 22/27-4-5 to N.E. 34-27-5-5. Grading.
 In Secs. 3, 10, 11, 14, 23-26-4-5. Improvement.
 Between R.L. 7 and 8, Morleyville and between 20/21-26-6-5. Grading.
 In Secs. 11/12, 7/12, 7/18-26-3/4-5. Culverts.
 Both sides of Ghost River. Grading and improvement.
 In Secs. 22/27-27-2-5. Culverts.
 In Secs. 22/23-27-2-5. Culverts.
 Through Secs. 1, 2, 3, 10, 9, 16, 17, 18, 19, 29/30-29-5-5. Grant to Silver Crown Lumber Co.
 Road up Big Hill Creek north of Cochrane. Improvement of road.
 Between Secs. 7/18-37-4-5. Improvement of road.
 West of Secs. 18/19-27-3-5. Improvement of road.
 North of 25-3-5. Repairs to road.
 Road through Grand Valley to Dog Pound. Repairs to road.
 Road west of Dog Pound Creek 3/4-29-4-5. Improvement of road.
 Between Secs. 34/35, 26/27, 22/25-26-4-5. Improvement of road.
 Through Twp. 25-4-5. Improvement of road.
 Road south side of Bow River to Steel Bridge. Repairing road.
 Between Secs. 11/14, 10/15, 9/16-25-4-5. Repairing road.
 North of Sec. 36-24-4-5. Repairing road.
 Morley Trail N.E. of Cochrane to Locherid P.O. Repairing road.
 West of Sec. 32-27-3-5. Improvement of road.
 N.W. 17 and S. of 18-25-4-5 through section 13, S. 14 to 16-25-5-5. Repairs to road.
 North of Twp. 25-5-5. Improvement of road.
 Sec. 16-25-1-5. Improvement of road.
 Road south of Cochrane. Improvement of road.
 E. of Sec. 1 to 36-43-20-4. Culverts and repairs.
 S. of Sec. 29, East 30-47-20-4. Culverts and repairs.
 South of Sec. 3-43-16-4. Improvement of road.
 North of Sec. 10-48-17-4. Improvement of road.
 South of Sec. 3-43-20-4. Improvement of road.
 East of Sec. 25-42-20-4. Grading road.
 West of Sec. 20-47-19-4. Repairs to road.
 S. 5, 6-49-20-4, and S. 1, 2, 3-49-21-4. Improvement of road.
 West of Sec. 20-48-21-4. Culverts and repairs.
 W. of Whitehush Secs. 1/12, 11/10, 3/4, 5/8, 17-42-21-4. Culverts and repair.
 Between Secs. 17/18-46-19-4. Improvement of road.
 Between Secs. 13/14-30-25-4. Improvement of road.
 Surveyed road E. of Didsbury in 16/17-31-1-5. Grading.
 Between Secs. 22/23-29-29-4. Repairs.
 North 7, 8, 9-31-26-4. Grading.
 In Secs. 19/30-51-24-4. Grading.
 In Secs. 34/35-52-22-4. Grading.
 S. and E. of Thorton 53-15-5, 53/64-16-5. Improvement of road.
 Rocky Mountain House 39, 40, 41-7-5. Repairs to road.
 North of Secs. 19-20-21 Tp. 30-7-5. Grading and repairs.
 N. 31, 32, 33-56-13-5 and 31 to 36-56-14-5. Improvement of road.
 Road to Bridge between 10-54-17-5. Improvement of road.
 South 1 to 6-56-15/16-5. Grading and repairs.
 Tote Road Wolf Creek to Carrot Creek and East. Improvement of road.
 N. of 25-53-14-5, N. 28, 29, 30 through 28-53-13-5. Grading.
 In Secs. 19, 20, 21-53-13-5. Improvement of road.
 West of 10, 15 and 22-53-13-5. Grading and repairs.
 West of 16 and 21-53-23-5. Improvement of road.

North 8-53-13-5. Grading and repairs.
 N. 31 and E $\frac{1}{2}$ 32-53-13-5. Improvement of road.
 E. 34-53-16-5 E. of S.E. 3-54-16-5. Grading road.
 N.E. of S $\frac{1}{2}$ 53-16-5 S. of S.W. 31-53-15-5. Improvement of road.
 West 8-53-13-5. Repairs to road.
 West of 23-53-13-5. Improvement of road.
 E. 36-56-14-5 E. 1 and 12-57-14-5. Grading road.
 In Sec. 2-51-26-5. Improvement of road.
 From Sawridge S. to E. D. & B. C. Ry. Repairs to road.
 West of 6/7-74-9-5. Improvement of road.
 Wabasca to Lesser Slave Lake. Improvement of road.
 West 21 and 28-77-19-5. General repairs.
 W. 15, 22, 27-77-19-5. General repairs.
 West of 77-20-5. Improvement of road.
 West of 78-21-5. Improvement of road.
 N. 19 to 24-74-16-5. N. of Secs. 24-78-17-5. Improvement of road.
 Road from Siding on E. D. & B. C. to Lake Shore at St. Bruno's Mission.
 Repairs to road.
 North of 21-78-21-5. Grading road.
 Between Secs. 20/21-77-21-5. Improvement of road.
 North 19, 20, 21-77-21-5. Repairs to road.
 North 10-78-21-5. Grading low place.
 In Secs. 3 to 34-78-21-5. Grading low place.
 Between Secs. 1/2-78-21-5. Improvement of road.
 West of 2 and 11-78-21-5. Grading road.
 N. of 22/23-77-19-5. Grading road.
 East of 18/19, 30/31-77-19-5. Grading road.
 N. 19 to 24-74-16-5 to N. 24-74-17-5. Improvement of road.
 North from 34 to 36-77-21-4. Improvement of road.
 Road through Blackfoot Reserve. Improvement of road.
 South-west of 19-22-22-4. Repairing culverts.
 In Sec. 31-22-23-4. Improvement of road.
 In Secs. 16/17-22-23-4. Improvement, 2 diversions.
 Between Secs. 21/28-22-22-4. Grading.
 In Secs. 2/3, 32/34-22/23-21/22-4. Repairs to road.
 In Secs. 25/26-27-26-4. Improvement of road.
 East 24 to 36-25-29-4. Grading road.
 From E. of 2 to 36-23-23-4. Grading road.
 In Tps. 22 to 25-22-4. Improvement of road.
 Between Secs. 10/15, 11/14, 1/2, 11/12-23-23-4. Improvement of road.
 S.W. 3-30-15-4 to N.E. 8-31-14-4. Improvement of road.
 N. Red Deer River N.W. 7-23-14-4. Repairs to road.
 North of Hyland to E. of 6 to 31 Tp. 31/32-17-4. Improvement of road.
 Between Secs. 24/25-28-19-4. Improvement of road.
 West of 26/35-28-19-4. Improvement of road.
 West of 27 and 34 North 22-28-19-4. Improvement of road.
 In Secs. 12 to 36-28-19-4. Grading.
 Between Secs. 28/29-28-19-4. Grading.
 Between Secs. 13/14-29-20-4. Grading.
 Road High River to Thorpis Ranch. Improvement of road.
 Between Secs. 21/28-18-29-4. Grading and repairs.
 In Sec. 15-18-2-5. Grading and repairs.
 In Secs. 23/24-36-28-4 and N. to Penhold. Improvement of road.
 In Twp. 38-23-4. Repairs to road.
 Between Secs. 15/16 and through 21-35-3-5. Improvement of road.
 West of Innisfail 24/25-35-1-5. Improvement of road.
 In Tps. 16/17-21/22-4 and N. 16-23/24-4. Improvement of road.
 W. of 6, 7, and S $\frac{1}{2}$ 19-17-20-4. Improvement of road.
 Between Secs. 7/18-17-17-4. Grading road.
 E. Tp. 11 to 13-22-4 S. from N.E. 35-10-22-4. Grading road.
 Between Secs. 29/30-12-21-4 to Between 17/18-13-21-4. Improvement of road.
 road.
 Between Secs. 7/12-12-22/23-4. Improvement of road.
 Between Secs. 21/22-12-21-4. Improvement of road.
 Between Secs. 7/18, 8/17, 19/16-13-21-4. Grading and repairs.
 In Secs. 13/14, 23/24-24-28-4. Repairs to road.
 Between Secs. 16/17-49-22-4. Improvement of road.
 Between 21/28-50-23-4. Improvement of road.
 In Tp. 50-23/24-4. Improvement of road.
 East of Millet. Repairs to road.
 South of 2, 3, 4-50-24-4. Improvement of road.

Between Secs. 20/29-50-26-4. Grading and repairs.
 Range Line Tp. 50-25/26-4, 36/31-49-25/26-4. Grading and repairs.
 Running N. and S. of Centre Line 48-25-4. Improvement of road.
 N. of Secs. 10, 11, 12 and E. of 16, 21, 28, 33-50-26-4. Improvement of road.
 W. of Secs. 5 to 32-50-26-4. Grading and repairs.
 Between Secs. 14/15-48-26-4. Grading and repairs.
 North of 7, 8, 9-50-26-4. Grading and repairs.
 On range line 48-26/27-4. Improvement of road.
 South of 47/48-27-4. Improvement of road.
 N. of 7 to 12-49-1-5. Grading road and repairs.
 East of 2-50-22-4. Grading road and repairs.
 East of 14-50-23-4. Improvement of road.
 North of 22-48-24-4. Improvement of road.
 Between Secs. 2/3, 10/11-48-24-4. Grading and repairs.
 Between Secs. 9/16, 9/10-50-25-4. Grading and repairs.
 East of 23-48-25-4. Grading and repairs.
 East of 33-49-26-4. Improvement of road.
 In Sec. 31-48-26-4. Improvement of road.
 East of 34-49-1-5. Improvement of road.
 Between 20/21-49-27-4. Grading road.
 West of 25-24-13-1 Tp. 49-1-5. Improvement of road.
 North of 20, 21-49-1-5. Improvement of road.
 Road W. of Forsher 41/42-1, 2, 3, 4, 5-5. Improvement of road.
 Between Tps. 39/40-26-4. Improvement of road.
 Through centre 4-41-2-5. Improvement of road.
 East 25 and 36-40-26-4. Grading road.
 12 miles between 12/13, West to 7/8-40-1/2-5. Grading road.
 North of 40-27-4. Grading and repairs.
 In 40-28/27-4. Grading and repairs.
 Between Secs. 2/3, 10/11, 14/15 etc. 39/40-25-4. Improvement of road.
 North of Alix 40/41-23-4. Improvement of road.
 Secs. 1, 2, 3, etc. 40/14-22-4. Improvement of road.
 E. of Secs. 21, 28, 23-41-22-4. Grading road.
 From Blackfalds west 39-27/28-4. Grading road.
 N. of 7 to 12-58-6/7/8-5 N. of 11/12-58-9-5. Covering corduroy.
 South of 1 to 6-57-9-5. Clearing and grading.
 North of 59-11-5. Ditching and grading.
 Road to ferry at Allandale. Clearing.
 West 1 to 36-59-12-5. Covering corduroy.
 N. of 16, 17, 18-58-6-5. Covering corduroy.
 Through centre 25-56-7-5. Grading.
 N.E. of Sangudo N. of Pembina River. Improvement of road.
 S.E. 23-55-6-5 to N.E. 15-56-6-5. Grading and covering corduroy.
 N. and S. of Churchill E. of 9 to 33-56-5-5. Grading and covering corduroy.
 East of 4 to 33-56-4-5. Clearing and grading.
 N. of 9 and 10-55-3-5. Improvement of road.
 N. 27 to 30-54-1-5. Improvement of road.
 East of Sec. 15/22-54-4-5. Improvement of road.
 Between 54-4/5-5. Improvement of road.
 Lac Ste. Anne to Island Lake. Repairing road.
 N. of Sec. 9 and 10-54-9-5. Repairing road.
 N. 35 and 36-54-3-5. Assistance to L. I. D.
 Between 29/30-12-21-4 to between 17/18-13-21-4. Improvement of road.
 Between 15/16, 21/22-8-21-4. Improvement of road.
 E. Tp. 11 to 13-22-4 S. from N.E. 35-10-22-4. Repairs, improvement of road.
 West 15/22/27/34-10-22-4. Repairs.
 N. 34-7-20-4 South 1-8-21-4. Repairs.
 North 12/7-6-7-4. Repairing road.
 East 29 and E. and N. 32-4-8-4. Repairing road.
 N. 7-11-9-4 N. 12-11-10-4. Improvement of road.
 Road in 5/6-9-4. Improvement of road.
 West 23-5-10-4. Grading road.
 East of 8/9/10-3-4. Grading road.
 Elkwater Lake to Medicine Lodge. Improvement of road.
 In 15-10-4-4 and in 33/34-9-4-4. Improvement of road.
 North 9-9-4. Grading and repairs.
 In 6/31, 3/34-9/10-2/3-4. Culverts and repairs.
 East Tp. 8/9-10-3-4. Improvement of road.

East 25/36-7-3-4. Improvement of road.
 In Secs. 9/16-10-2-4. Improvement of road.
 S. 25 to 30-9-2-4 to S. 25 to 27-9-3-4. Improvement of road.
 Between Secs. 19/24-9-3/4-4. Grading and repairs.
 S.E. 16-5-4 N. through Tps. 6/7/8-5-4. Grading and repairs.
 Between Secs. 4/5-11-7-4. Improvement of road.
 North 22 to 24-3-7-4. Improvement of road.
 Between Sec. 16/17-10-9-4. Improvement of road.
 Between Secs. 7/18-11-8-4. Improvement of road.
 N. 19, 20, 21-16-4. Grading.
 West of Tp. 4/5-10-4. Grading.
 In Sec. 14-7-9-4. Improvement of road and repairs.
 In Secs. 24/25-11-1-4. Improvement of road and repairs.
 Between Secs. 4/5-6-6-4. Improvement of road and repairs.
 Road from Walsh to Graburn. Repairs.
 Between Secs. 22/27-9-27-4. Repairs to road.
 In Secs. 28/29, 32/33-9-27-4. Repairs to road.
 In Secs. 34/35-9-27-4. Improvement of road.
 N. 28, 29, 30-9-27-4. Improvement of road.
 In Secs. 8/17-9-26-4. Grading and repairs.
 Between Secs. 23/26-7-25-4. Grading and repairs.
 Between Secs. 1/6/7-10-23-4. Improvement of road.
 Between Secs. 21/28-10-23-4. Improvement of road.
 Between Secs. 9/16-10-23-4. Grading and culverts.
 Road east of Monarch. Improvement of road.
 Between Secs. 7/18-10-23-4. Improvement of road.
 Between Secs. 15/16-10-24-4. Improvement of road.
 Road west of Stavely. Improvement of road.
 Between Secs. 11/12-15-28-4. Improvement of road.
 Road from Willows to Nanton. Grading and culverts.
 In Secs. 30, 31, 32-14-28-4 and 4-15-28-4. Improvement of road.
 In Sec. 12-16-29-4. Improvement of road.
 In Secs. 30/32-14-28-4. Improvement of road.
 S. of Sec. 9-22-2-5. Improvement of road.
 In Sec. 30-22-2-5. Improvement of road.
 Road west of Bowden. Improvement of road.
 South of 13, 14, 15, 16, 17, 18-34-27-4. Grading road.
 Between Secs. 2/3, 10/11-33-6-5. Grading road.
 From N.E. 21-33-5-5 to N.W. 19-33-7-5. Improvement of road.
 East of 4, 9, 16, 21, 28 and 33-5-5. Improvement of road.
 North of 9-33-6-5. Clearing and grading.
 W. 16 and 21-33-6-5. Clearing and grading.
 Between Secs. 16/17-33-4-5. Improvement of road.
 Between Secs. 32/33-33-28-4. Improvement of road.
 Over C. P. Ry. Crossing at Pincher City. Improvement of road.
 Between Secs. 5/6, 4/8-43-27-4. Grading and repairs.
 North of 7/12-42-23-4. Cutting hills.
 West of 3/10-43-2-5. Improvement of road.
 North of 33-43-26-4. Grading.
 Between Secs. 4/5-42-1-5. Improvement of road.
 East of 36-42-24-4. Covering corduroy.
 Between 13/14-43-23-4. Small bridge.
 West of 19-43-12-5. Covering corduroy.
 Between Secs. 19/30-43-1-5. Repair road.
 North of 26/27-42-26-4. Grading road.
 Between Secs. 11/14-44-4-5. Ditching and repairing road.
 Between Secs. 26/23-42-22-4. Repairing road.
 Between Secs. 8/17-44-25-4. Ditching and grading.
 Between Secs. 20/21-44-27-4. Improvement of road.
 N.E. 27-42-1-5. Improvement of road.
 Between Secs. 3/10-43-23-4. Grading road.
 S. of 15/16, 17/18-43-23-4. Improvement of road.
 S.W. ¼ of 8-43-23-4. Subway.
 Ponoka to Battle Creek through 43-23/24/25-4. Improvement of road.
 West of 13-44-28-4. Improvement of road.
 North of 7, 8, 9-44-27-4. Improvement of road.
 North of 13, 14, 15-44-28-4. Grading road.
 In Sec. 12-44-28-4. Grading road.
 W. of Forsher 41/42-1 to 5-5. Grading road.
 Between Secs. 23/26-43-28-4. Improvement of road.
 In Sec. 27-43-27-4. Improvement of road.

Between Secs. 20/21-43-3-5. Improvement of road.
 North of 30-42-24-4. Grading and repairing.
 N. of 36-58-3-5, N. of 53-26/27-4. Corduroying.
 Tp. 62 Rg. 25 to 27-4 and 62-1-5. Repairing road.
 N. of Secs. 7 to 12-56-1/2/3-5. Grading.
 Between Secs. 35/36-58-2-5. Improvement of road.
 Between Secs. 35/2-57/58-3-5. Grading road.
 N. and S. of Cherrill E. 9 to 33-56-5-5. Improvement of road.
 Between Secs. 8/17-60-1-5. Improvement of road.
 Between Secs. 25/30-58-27/1-5. Grading.
 Between Secs. 11/12-59-4-5. Improvement of road.
 In Secs. 2/11, 1/12, 6/7-61-26-4. Grading and repairing road.
 North 26, 27, 28, 29, 30-58-1-5. Grading and repairing road.
 In 10, 11, 12, 15, 21, 22-61-1-5, 7/8-61-27-4. Improvement of road.
 North of Pembina River 19 to 23-57-5-5. Improvement of road.
 Between Secs. 13/14-59-25-4. Improvement of road.
 Between Secs. 24/25-60-1-5. Improvement of road.
 Between Secs. 23/24-60-1-5. Repairing road.
 Between Secs. 15, 22, 15/16-64-1-5. Repairing road.
 Grande Prairie W. towards Halcourt. Improvement of road.
 Road west of Grande Prairie. Improvement of road.
 Road leading to Bezanson. Grading road.
 Between Secs. 20 to 24-78-6-6. Grading and repairs.
 N. 31 to 35-73-7-6 north 73-8-6. Grading and repairs.
 West 29 and 32-78-6-6. Improvement of road.
 Bear Lake Road. Improvement of road.
 N. 21, 22, 23 and through 25-71-5-6. Improvement of road.
 N. 7 to 12-74-8/9/10-6. Grading road.
 Between 22/27-72-6-6. Grading slough.
 Between Secs. 20/29-83-21-5. Improvement of road.
 North 7/8-72-5-6. Improvement of road.
 Between Tps. 81/82-26-5. Improvement of road.
 N. of 12-84-22-5. Improvement of road.
 Between 8/17-83-24-5. Grading and repairs.
 Road from Halcourt to Grande Prairie. Improvement of road.
 In Sec. 29-83-21-5. Improvement of road.
 In Secs. 19, 21 to 24, 29/30-83-22-5. Improvement of road.
 W. of 3 to 34-77-6-6 and W. 3 to 33-78-6-6. Grading and improving.
 Road to ferry 2-21-11-4. Improvement of road.
 Road to ferry through 14/15 and W.W. 22/23-1-4. Grading road.
 Between Secs. 34/35-20-10-4. Improvement of road.
 From S.W. of 4-13-3 east 10 miles. Improvement of road.
 In Sec. 14-22-4-4. Improvement of road.
 North of 34-14-4-4. Repairs to road.
 In 1-23-8-4 and 6-23-7-4. Repairs to road.
 Between Secs. 23/26 and 24/25-13-7/9-4. Culverts and repairs.
 East of Sec. 1-15-6-4. Improvement of road.
 North of 7 to 12-20-9-4. Improvement of road.
 Between 11/14-20-9-4. Improvement of road.
 In Secs. 1 to 6-43-10-4. Repairing road.
 Between Secs. 20/21-40-6-4. Work on muskeg.
 Between Secs. 5/6-41-10-4. Getting grade.
 N. of Hardisty 6, 7, 8-43-9-4. Repair grade.
 East of 6 to 31-41-7-4. Grading slough.
 N. $\frac{1}{2}$ 32-39-5-4. Improvement of road.
 Between Secs. 10/11-40-5-4. Improvement of road.
 S.W. 1/4-29-39-3-4. Improvement of road.
 N. of Sec. 32-39-4-4. Grading road.
 East $\frac{1}{2}$ 8-39-2-4. Repairing road.
 S. $\frac{1}{2}$ 28-43-10-4. Improvement of road.
 S. of 4 and 5-44-10-4. Improvement of road.
 West of 33/31-39-3-4. Improvement of road.
 In Sec. 35-44-8-4. Grading road.
 Between 1/2, 35/36-39-7-4. Grading road.
 In Sec. 15-42-8-4. Grading road.
 In Sec. 20-38-5-4. Grading road.
 Between 3/4-40-8-4. Improvement of road.
 Between 25/36-9-3-5. Improvement of road.
 Between Secs. 14, 15, 16-23-5-5. Improvement of road.
 Raven P.O. to Rocky Mountain House. Improvement of road.
 N. and S. of Leslieville. Improvement of road.

In Secs. 1/2, 11/12, 13/14, 23/24-39-4-5. Grading and repairing road.
 Across Narrows of Stinking Lake. Improvement of road.
 Rocky Mountain House to Prairie City Settlement. Improvement of road.
 Road S. of Stettler 37/38-19-4. Improvement of road.
 Between Secs. 4/5-39-19-4. Improvement of road.
 In Sec. 9-38-15-4. Grading road.
 East of 6/7-38-14-4. Repairing road.
 North 34-36-17-4. Repairing road.
 Road S. of St. Paul des Metis. Corduroying road.
 Between 19/24-61-5/6-4. Corduroying road.
 Between Secs. 23 to 26-56-5-4. Grading.
 Between Secs. 8/9-60-8-4. Grading hill.
 Elk Point S. to Saskatchewan river. Improvement of road.
 Between Secs. 4/5-57-6-4. Improvement of road.
 S. of 1 and 3-55-2-4. Grading road.
 East of 56-4-4. Improvement of road.
 Between Secs. 17/18-56-8-4. Improvement of road.
 In Secs. 1, 2, 3-60-7-4. Improvement of road.
 Between Secs. 27 and 34-56-5-4. Grading road.
 Between Secs. 10/15-63-2-4. Grading road.
 E. of 24 and 25-60-6-4. Grading road.
 Between Secs. 25/26-51-27-4. Improvement of road.
 Between Secs. 3/4-42-15-4. Improvement of road.
 Between Secs. 26/27-41-14-4. Improvement of road.
 Between Secs. 20/21-43-15-4. Grading road.
 N. 8-40-11-4. Grant to Rural Municipality.
 In Sec. 6-61-23-4. Corduroying.
 Between Secs. 1 and 12-60-25-4. Corduroying.
 In Sec. 32-57-23-4. Corduroying.
 Between Secs. 25/36-59-19-4. Corduroying.
 Correction Line N. 58-20/21-4. Corduroying.
 In Sec. 19-56-24-4. Corduroying.
 In Sec. 16-55-24-4. Improvement of road.
 E. 5/32-58-18-4. Improvement of road.
 Between 8/9, 16/17, 20/21-58-22-4. Improvement of road.
 Between 17/18/19/20-58-22-4. Improvement of road.
 West of 58-21-4. Grading and repairing road.
 E. of 4/33-58-18-4. Improvement of road.
 Between Secs. 23/26-58-20-4. Improvement of road.
 Between Battenberg and Fedora. Improvement of road.
 Between 14/15-57-12-4. Improvement of road.
 Through 22, 23, 24 N. 20/21-64-22-4. Improvement of road.
 Between 7/18, 12/13-55/24/25-4. Improvement of road.
 Between Secs. 14/15, 22/23-65-22-4. Grading and improvement of road.
 Between Secs. 25/26-59-18-4. Repairing road.
 E. of 5 to 32-59-19-4. Repairing road.
 Between Secs. 15/16-60-18-4. Repairing road.
 S.W. of Athabasca Landing 66-22-4. Improvement of road.
 E. 10 and 15-57-23-4. Improvement of road.
 Between 2/11, 3/10, 4/9-62-24-4. Improvement of road.
 N. 24-65-23-4. Improvement of road.
 E. 30/31-56-23-4. Improvement of road.
 North of Sec. 31-55-26-4. Culvert repairing.
 South of 6, 7, 18, 19, 30, 31-57-24-4. Grading.
 Between Secs. 13/14-58-25-4. Grading.
 East and north from St. Emile 57-25-4. Grubbing.
 In Tp. 24/25-4. Improvement of road.
 Between Secs. 4/5-58-24-4. Grading.
 West of 55, 56, 57-25-4. Corduroy and covering same.
 Between Secs. 13/14-56-25-4. Clearing and grubbing.
 Between Secs. 35/36-58-24-4. Grading and levelling.
 E. of 15/22-57-24-4. Grading and levelling.
 Between Secs. 7/18, 12/13-55-24/25-4. Grading.
 Between Secs. 19/20-55-26-4. Grading.
 Between Secs. 14/15-57-27-4. Grading.
 Between Secs. 28/29-55-26-4. Improvement of road.
 Between Secs. 10/15-56-25-4. Work on bridge.
 Between Secs. 32/33-54-27-4. Grading.
 Between Secs. 22/27-55-25-4. Grading and ditching.
 North of 32-57-24-4 and north of 36-57-25-4. Clearing.
 North of 31-56-25-4. Clearing.

In Sec. 36-54-26-4. Grading.
 Between Secs. 14/15-57-26-4. Grading.
 Riviere Qui Barre to Roy. Improvement of road.
 Secs. 15 to 34-54-26-4. Grading.
 In Secs. 8 and 9-55-26-4. Grading.
 Between Secs. 18/19-55-26-4. Improvement of road.
 In Secs. 27 and 34-55-25-4. Improvement of road.
 In Sec. 23-55-25-4. Improvement of road.
 Between Secs. 19/30-55-26-4. Grading road.
 In Secs. 11/12-57-27-4. Improvement of road.
 In Sec. 7-55-27-4. Improvement of road.
 South from Grassy Lake 10-13-4. Repairs to road.
 In Sec. 1-6-21-4. Repairs to road.
 Between Secs. 23/24-6-21-4. Improvement of road.
 S.W. of Sec. 6-11-19-4. Improvement of road.
 Between Secs. 23/26, 24/25-8-21-4. Improvement of road.
 Between Secs. 26/27-34/35-9-18-4. Grading and repairs.
 In Sec. 6-10-17-4. Grading and repairs.
 Between Secs. 5/6-10-18-4. Grading and repairs.
 Between Secs. 1/6-10-18/19-4. Improvement of road.
 Between Secs. 5/6-7/8-9-19-4. Improvement of road.
 Between Secs. 26/27-6-20-4. Improvement of road.
 S.W. 14-8-21-4. Grading and repairs.
 N. 9 to 12-6-20-4. Grading and repairs.
 Between Secs. 26/27-6-21-4. Grading and repairs.
 Between Secs. 15/16-6-20-4. Improvement of road.
 Between 35/2 and 36/1-5/6-22-4. Improvement of road.
 Between Secs. 2/3-6-22-4. Improvement of road.
 Between Secs. 11/12-8-21-4. Grading and repairs.
 South $\frac{1}{2}$ 35-7-22-4. Grading and repairs.
 Between Secs. 13/14-9-21-4. Improvement of road.
 Between Secs. 22/27-11-20-4. Improvement of road.
 Between Secs. 8/9, 16/17-11-20-4. Improvement of road.
 North 31/32-8-19-4. Repairing road.
 Between 7/18-17-17-4. Repairing road.
 In Sec. 6-12-19-4. Repairing road.
 North of Sec. 10-11-19-4. Improvement of road.
 Between Secs. 12/13-9-20/21-4. Improvement of road.
 Between Secs. 19/30-6-19-4. Improvement of road.
 In Secs. 34, 35, 36-16-17-4. Improvement of road.
 In Sec. 6-52-6-4. Improvement of road.
 Between Secs. 32/33 and 4/5-51/52-9-4. Grading flat.
 S.E. 18 to S.E. 13-13-52-12-4. Corduroying and grading.
 Between Secs. 23/24-50-9-4. Building grade.
 Between Secs. 13/14-50-9-4. Building grade.
 S. of Innisfree to Lake Alice. Improvement of road.
 In Sec. 31-54-10-4. Improvement of road.
 Road from Minburn to Radino. Improvement of road.
 Road across Grizzly Bear Coulee. Improvement of road.
 Between Secs. 12/13-55-7-4. Grading and improvement of road.
 Between Secs. 4/5-55-9-4. Grading and improvement of road.
 In Sec. 2-50-9-4. Improvement of road.
 Road south of 50-15/16-4. Grading.
 Road Vegreville to Hurry. Grading.
 S. of 32, 33-51-13-4. Grading.
 South of Mundare. Improvement of road.
 In Secs. 13 to 18-52-15-4. Improvement of road.
 North of 12/13-49-20-4. Improvement of road.
 In 14th Base Line Beaver Lake west. Improvement of road.
 Telephone road 49/50-15, 16, 17-4. Grading road.
 N. of N.E. 14-49-16-4. Repairing road.
 Between Secs. 33/34-51-12-4. Improvement of road.
 In Sec. 13-53-13-4. Improvement of road.
 Between Secs. 8/17-53-12-4. Grading slough.
 North of 31-51-15-4. Improvement of road.
 Road east of Mundare. Improvement of road.
 Between Secs. 20/29-54-18-4. Grading.
 North of 32-49-17-4. Grading.
 East of 11 and 14-50-14-4. Repairing road.
 North of 19, 20-51-12-4. Improvement of road.
 Between Secs. 32/5-57/58-16-4. Corduroy.

Between Secs. 4/5, 8/9-57-17-4. Corduroy.
 Between Secs. 1/6 to 31/36-55, 56, 57-16/17-4. Repairing road.
 Between Secs. 31/36-56/17-18-4. Corduroy.
 Between Secs. 2/35-55/56-17-4. Corduroy.
 Between Secs. 31/32-57-16-4. Improvement of road.
 Between Secs. 3/34 and 6/31-55/56-18-4. Improvement of road.
 Between Secs. 7/18-56-20-4. Improvement of road.
 North side R. lot 1 Fort Saskatchewan. Grading road.
 Lamont to Saskatchewan River 59-19-4. Grading road.
 Road near Whitford Borwich Sloughs. Improvement of road.
 In Secs. 4, 9, 16-45-10-4. Improvement of road.
 South 26/27-46-10-4. Grading.
 In Sec. 19-41-1-4. Grading.
 Road east of Milk River. Improvement of road.
 Between Secs. 32/33-3-17-4. Repairing road.
 Between Secs. 30/31-2-13-4. Repairing road.
 Between 23/26, 22/27, 21/28-1-17-4. Grading.
 Between Secs. 14/15-1-17-4. Grading.
 Between Secs. 10/15, 9/16-1-17-4. Repairing road.
 Between Secs. 25/26-1-17-4. Repairing road.
 Between Secs. 8/9-1-17-4. Repairing road.
 Between Secs. 14/15-3-11-4. Repairing culvert.
 Between Secs. 12/13-3-11-4. Grading.
 Between Secs. 19/30-3-11-4. Grading.
 Between Secs. 16/17, 28/29, 20/21, 32/33-2-15-4. Culverts.
 North 31 to 34-3-17-4. Grading.
 Between Secs. 23/24-2-16-4. Grading.
 Between Secs. 20/29-3-17-4. Improvement of road.
 Between 9/10, 15/16, 21/22-1-14-4. Improvement of road.
 Between 21/22-1-12-4. Grading road.
 North of 1-14-4. Grading road.
 North of 7 to 12-1-14-4. Improvement of road.
 Between 21/22-3-16-4. Improvement of road.
 Between 22/27-1-14-4. Improvement of road.
 North of 7 to 21-2-15-4. Grading road.
 East of 1-2-15-4. Grading road.
 Between Secs. 26/27-2-16-4. Improvement of road.
 North of 36-1-17-4, north 31/32-1-16-4. Culverts and repairs.
 Between 13/24-1-13-4. Improvement of road.
 E. of Secs. 5, 8, 17, 20, 29, 30-55-13-4. Improvement of road.
 Road from Desjarlais to Stry. Improvement of road.
 Road from Edward to Pakan. Improvement of road.
 Between Secs. 7/12-56-14/15-4. Grading road.
 Between Secs. 3/4-56-14-4. Grading road.
 Villette to Downing. Grading road.
 Between 10/11-57-15-4. Improvement of road.
 Between 5/32-54/55-13-4. Repairing road.
 N. of Lavoy 53/54-52-13-4. Repairing road.
 Road between 33/34-58-15-4. Repairing road.
 East of 11 and 22-59-15-4. Improvement of road.
 E. 12/13, 13/14-59-17-4. Improvement of road.
 Between Secs. 19/20-59-17-4. Grading road.
 E. of 8/17-59-16-4. Improvement of road.
 Between Secs. 17 and 20-45-22-4. Improvement of road.
 In Sec. 2-44-22-4. Improvement of road.
 Between 7/8-47-25-4. Repair road.
 S. of 28/29-45-1-5. Repair road.
 N. 8-47-22-4. Repair road.
 Wetaskiwin to Coal Lake. Improvement of road.
 Between Secs. 7/8, 5/6-46-23-4. Repairs road.
 Between 14/15-47-25-4. Repairs road.
 Between 19/20-45-26-4. Grading road.
 Between 1/2-47-3-5. Grading road.
 North 1/2 46-2-5. Improvement of road.
 Between 10/11, 14/15-45-2-5. Improvement of road.
 North of 27/28-47-26-4. Grading road.
 Between 44/45-2/3-5. Improvement of road.
 In Sec. 4-46-27-4. Improvement of road.
 In Secs. 4 and 9-40-27-4. Grading road.
 Between Secs. 21/22-45-26-4. Improvement of road.

TRUNK ROADS

During 1916 Trunk Road construction and maintenance was undertaken on the following main roads:—

- Road south from Youngstown.
- Road west from Chinook.
- Road north and south from Sibbald.
- Road north from Islay.
- Road north from Lloydminster.
- Road north from Kitscoty.
- Road from Edmonton to Lloydminster.
- Road south from Kitscoty.
- Road from Lloydminster south to Battle River Bridge.
- Road east from Athabasca to Donatville.
- Road north from Athabasca Landing.
- Road from Lac La Biche to Athabasca Landing.
- Road from Athabasca Landing to Lesser Slave Lake.
- Road from Athabasca Landing to Lake Baptiste.
- Road from around east end of Lac La Biche.
- Road from St. Paul des Metis to Brosseau.
- Road from Victoria to Lac La Biche.
- Road from Plamondon to R. C. Mission.
- Road from Lac La Biche to Athabasca Landing.
- Road from St. Lena to Grandin.
- Road from St. Paul des Metis to St. Vincent.
- Road east from Cork.
- Road east from Clarkville.
- Road west from Cork.
- Road from Bassano to Hutton.
- Road from Coding to Steel Bridge.
- Road from Carlstadt to Brooks.
- Road from Bassano to Brooks.
- Road from Gleichen to Cluny.
- Road from east of Cluny.
- Road from Calgary to Red Deer.
- Road from Calgary to Morleyville, north of Bow River.
- Road north from Calgary-Banff Trail between ranges 2/3.
- Road from Calgary to Macleod.
- Road from Calgary to Morleyville, south of Bow River.
- Road from Dusseldorf to Neerlandia.
- Road from Medicine Lodge to Grande Prairie.
- Road from Holmes' Crossing to Mellowdale.
- Road from Barhead to Mellowdale.
- Road from Sounding Creek north.
- Road from Castor to Talbot and east.
- Road from Castor east along C.P.R.
- Road from west of Laverna.
- Road from Cardston to Mountain View.
- Road from Raley to Spring Coulee.
- Road from Cardston to International Boundary.
- Road from Macleod to Meadow Creek.
- Road from Stavely to Willows.
- Road east from Airdrie.
- Road from Blind Line west of Airdrie.
- Road north from Ohaton.
- Road from east and west of Camrose.
- Road from south of Daysland.
- Road from east of Ferintosh.
- Road from Kingston to New Sarepta.
- Road from west of Meeting Creek.
- Road from north of Camrose.
- Road from south of Bawlf.
- Road from north of Daysland.
- Road from east and west of Donalda.
- Road from Mundare to Bawlf and south.
- Road from Didsbury west to Fallis Lumber Creek.
- Road from Three Hills to Ghost Pine Creek.

Road from Crossfield east.
Road from north of Cooking Lake to Uncas.
Road from Edmonton to Red Deer.
Road from Cooking Lake east.
Road from Strathcona east.
Road from Deville south.
Road from Medicine Lodge to Grande Prairie.
Road from Peers to Macleod River.
Road from between Tollerton and Danderand.
Road from north of Edson.
Road from north of Hinton.
Road from Yates north and east.
Road from between Big Prairie and Prairie River Settlement.
Road from Lesser Slave Lake to Sturgeon Lake.
Road from Lesser Slave Lake to Peace River Landing.
Road from Whitefish Lake to Peace River District.
Road from Calgary to Gleichen.
Road from Gleichen east.
Road from Beiseker east and west.
Road from south of Hanna.
Road from Richdale east.
Road from Richdale north.
Road from Stettler south.
Road Dowling Lake north.
Road from Hanna to Craigmyle.
Road from Craigmyle south.
Road from Hanna east and north.
Road from Munson west.
Road from Innisfail west to Mountain House.
Road from Penhold to Lousana.
Road from Innisfail west to Clearwater River.
Road from Innisfail to Perbeck and east.
Road from Carmangay east.
Road from Lacombe west.
Road from Lacombe east.
Road from Bashaw west.
Road from Stettler east and west.
Road from Leduc east.
Road from Leduc west.
Road from Millet to Pigeon Lake.
Road from Saron east and west.
Road from Edmonton to Entwistle.
Road from Wanekville north.
Road from Entwistle south.
Road from Lac Ste. Anne to Whitecourt.
Road from Entwistle west.
Road from Lac Ste. Anne north and west.
Road from Lac Ste. Anne north.
Road from Onoway to Carvel.
Road from St. Albert to Lac Ste. Anne.
Road from Junkins north.
Road from Wanekville to Peavine.
Road from Macleod to Lethbridge.
Road from Medicine Hat to Seven Persons.
Road from Lamour north.
Road from Medicine Hat to Josephsburg.
Road from Medicine Hat south to Comrey.
Road from Walsh to Many Islands Lake.
Road from Seven Persons south to Thompson.
Road from Seven Persons north.
Road from Seven Persons west.
Road from Irvine south.
Road from Winnifred south.
Road from Irvine to Elkwater Lake.
Road from Pashley north and south.
Road from Pashley east.
Road from Seven Persons to Pakowki.
Road from Nemiskam north.
Road from Winnifred north.
Road from Irvine north.
Road from Irvine to Walsh.

Road from Faith north.
Road from Macleod to Porcupine Hills.
Road from Macleod to Lethbridge.
Road from Macleod to International Boundary via Cardston.
Road from Macleod to Pincher Creek.
Road from Nanton south-west to Willow Creek.
Road from Nanton west.
Road from Calgary to Millarville.
Road from Okotoks to Black Diamond and Lineham.
Road from Sundre to Bearberry.
Road from Bowden west.
Road from Sundre east.
Road from Olds west.
Road from Cowley south and east.
Road from Macleod to Pincher Creek.
Road from Ponoka west.
Road from Ponoka to Red Deer Lake.
Road from Springdale to Home Glen.
Road from east of Sion to Seymour.
Road from east and west of Clyde.
Road from Dunstable east.
Road from Belvedere east and west.
Road from Rich Valley north and south.
Road from Onoway north and south.
Road from Westlock south.
Road from Dusseldorf north and west.
Road from Athabasca Trail south of Dunrobin.
Road from Peace River Crossing to Fort Vermilion.
Road from Shaftesbury Settlement along Peace River.
Road from Lesser Slave Lake to Peace River Crossing.
Road from Dunvegan to Grande Prairie.
Road from Peace River Landing to Spirit River.
Road from Redlaw up Beaver Lodge at Swan Lake.
Road from Lake Saskatoon to Beaver Lodge.
Road from Alderson to Suffield.
Road from Bowmanston south.
Road from Suffield north.
Road from Hardisty south.
Road from Hardisty and Rosyth.
Road from Frank to Lundbreck.
Road from Frank to Blairmore.
Road from Red Deer west, via Snake Lake.
Road from Red Deer west, via Evarts.
Road from Red Deer to Hillsdown.
Road from St. Paul des Metis to Moose Lake.
Road from Frog Lake to Beaver Lake.
Road from Durlingville north.
Road from Beaver River to Cold Lake I.R.
Road from Onion Lake to Frog Lake.
Road from Elk Point to Keheewin I.R.
Road from Elk Point to St. Paul des Metis.
Road from Cold Lake to Moose Lake.
Road from Frog Lake to Lea Park.
Road from Mooswit north.
Road from Frog Lake to Mooswit.
Road from Stettler east and west.
Road from Halkirk south.
Road from Stettler to Buffalo Lake.
Road from Stettler south.
Road from Big Valley to Gopher Head.
Road from Castor east.
Road from Donalda east and west.
Road from Castor east to Bulwark.
Road from Castor south.
Road from Hart Lake north to Gadsby.
Road from Erskine to Buffalo Lake.
Road from Clover Bar Bridge to Big Island.
Road from Tommy La Potac I.R.
Road from Holborn east.
Road from Edmonton to St. Albert.
Road from Duffield north.

Road from Seba south to Tomahawk.
Road from Edmonton east to Kinsella.
Road from Strome to Killam.
Road from Lougheed to Sedgewick.
Road from Alliance north and south.
Road from Sedgewick north.
Road from Killam south.
Road from Lougheed to Hardisty.
Road from Kinsella south.
Road from Bruce to Strome.
Road from Daysland to Strome.
Road from Viking north.
Road from Edmonton to Fort Saskatchewan.
Road from Colinton east and west.
Road from Sprucefield south.
Road from Opal north.
Road from Victoria to Fort Saskatchewan.
Road from Edmonton to Athabasca Landing.
Road from Byron Siding west.
Road from Byron Siding east.
Road from Legal to Busby.
Road from Volmer east and west.
Road from Seymour to Mearns.
Road from Raymond north.
Road from Coaldale north.
Road from Stirling to Lethbridge.
Road from Taber east.
Road from Lethbridge to Taber, and east.
Road from Stirling south.
Road from New Dayton to Wills Siding and west.
Road from Burdett south.
Road from Lethbridge to Magrath.
Road from Magrath north and east.
Road from Vermilion to Innisfree.
Road from Mannville north and south.
Road from Northern Valley to Elk Point.
Road from Innisfree north.
Road from Mannville south.
Road from Campbell Lake north.
Road from Vegreville to St. Paul des Metis.
Road from Chipman to Tofield.
Road from Vegreville to Desjarlais Crossing.
Road from Vegreville through Brosseau to St. Paul.
Road from Mundare to Bawlf and south.
Road from Mundare to Pakan.
Road from Fort Saskatchewan to Andrew.
Road from Fort Saskatchewan east.
Road from Bruderheim north.
Road from Baxter Lake south.
Road from Heath north.
Road from Warner south.
Road from Warner north.
Road from Coutts east.
Road from New Dayton east.
Road from Milk River to Kippingville.
Road from New Dayton to Mills Siding.
Road from Warner east.
Road from Foremost south.
Road from Victoria north.
Road from Shandro north.
Road from Whitford north.
Road from Desjarlais east.
Road east and west of Wahstao.
Road from Wetaskiwin to Buck Lake.
Road from Wetaskiwin east.
Road from Duhamel west.
Road from Bonnie Glen to Pigeon Lake.
Road from Millet to Pigeon Lake.
Road from Bear Hills Lake north-west.

SURVEYS BRANCH

Edmonton, February 15th, 1917.

THE DEPUTY MINISTER,

Department of Public Works,

Edmonton, Alberta.

Sir:—I beg to submit the following report in connection with work of the Survey's Branch during the year 1916.

All survey parties entered the field about the first week of May and completed field operations about the latter part of November.

I attach hereto a general summary of the work which shows a large number of surveys being carried forward for the year 1917, while the number completed stands about the same as for the year 1915.

Very few townsite plans were presented for approval.

Satisfactory progress was made in the survey of the boundary between Alberta and British Columbia.

The summary appended shows the work of the Branch during the year, also the report of each District Surveyor and Engineer is attached hereto.

I have the honour to be, Sir,

Your obedient servant,

A. P. C. BELYEA,

Assistant to the Director of Surveys.

SUMMARY.

Surveys required and brought forward from 1915.....	801
Surveys asked for during 1916	786
Surveys made during 1916	573
Surveys carried over to 1917 schedule	853
Surveys made without instructions (included in above figures).....	99
Miscellaneous examinations made during the season.....	161
Plans prepared and filed in the Land Titles Office.....	525
Certificates of title received for roads.....	440
Certificates of title received for lands given for public purposes under Departmental Regulations regarding subdivisions.....	36
Certificates of title of Public Buildings.....	1
Certificates of title received for land other than surveyed roads (areas cut off by surveyed roads).....	5
Transfers issued covering roads no longer required.....	100
Number of plans of subdivisions approved during 1916.....	46

LEASE OF ROAD ALLOWANCES.

Number of new applications to lease road allowances.....	46
Number of new applications granted.....	17
Number of leases granted during 1916 (including free leases issued as compensation for surveyed roads)	174

EXPENDITURE OF SURVEYS BRANCH FOR THE YEAR 1916.

General expenses of surveys.....	\$68,213.74
Alberta & B. C. boundary survey.....	6,271.46
Compensation for surveyed roads.....	21,387.33
Printing	401.94
Survey posts	163.85
Sundries	1,675.89
	\$98,114.21

INCOME OF SURVEYS BRANCH FOR 1916.

Fees received in respect to plans of subdivisions submitted	\$6,752.65
Rentals from road allowance leases.....	318.00
Sundry fees from sale of maps, diagrams, etc.....	104.30
	\$7,174.95

Edmonton, January 13th, 1917.

Sir:—I beg to submit the following report in connection with survey work in the District of North Alberta during the year 1916.

I organized my party the first week of May, and first attended to some outstanding work at Eunice on the Edmonton, Dunvegan & B. C. Railway. Then I moved easterly along the north of the Saskatchewan River through St. Paul des Metis until I reached the east boundary of the province. I then worked west along the south of the river and attended to all outstanding work north of township 52, completing my season's work at range 8, west 4th meridian.

I was called to the office about July 12th to assist the Director of Surveys at office work, and thus attended to the actual field work for the remainder of the season in a supervising capacity only.

The weather in general was very disagreeable for survey work. I disbanded my party about the 20th of December.

I attach hereto list of work done, classified as: Diversions, New Roads, Changes in Roads and Examinations.

Your obedient servant,

A. P. C. BELYEA,

District Surveyor and Engineer.

L. C. CHARLESWORTH, Esq.,

Deputy Minister of Public Works,

Edmonton, Alberta.

ROAD DIVERSIONS.

Survey No.	File No.	Description.
105-16	23200	East half Sec. 19, Tp. 58-22-4.
106-16	23201	S. W. $\frac{1}{4}$ Sec. 17, Tp. 58-22-4.
138-16	23207	South half Sec. 15, Tp. 54-3-4.
139-16	23205	S. W. $\frac{1}{4}$ Sec. 4 and S. E. $\frac{1}{4}$ Sec. 5, Tp. 54-3-4, also N. W. $\frac{1}{4}$ Sec. 33, Tp. 53-3-4.
268-16	23325	East half Sec. 19, Tp. 59-10-4.
269-16	23324	N. W. $\frac{1}{4}$ Sec. 19, Tp. 59-10-4.
271-16	23326	S. E. $\frac{1}{4}$ Sec. 13, Tp. 59-11-4.
373-16	23429	S. W. $\frac{1}{4}$ Sec. 2 and S. E. $\frac{1}{4}$ Sec. 3, Tp. 54-2-4.
374-16	23430	East half Sec. 25, Tp. 54-8-4.
376-16	23432	N. E. $\frac{1}{4}$ Sec. 9, Tp. 54-8-4.
377-16	23433	W. $\frac{1}{2}$ Sec. 4 and S. W. $\frac{1}{4}$ Sec. 9, Tp. 54-7-4.



125' SPAN, TWO 20' APPROACHES, OVER WILLOW CREEK, NORTH-WEST OF MACLEOD.



200' SPAN ON CONCRETE ABUTMENTS OVER OLDMAN RIVER, NORTH OF COWLEY.



125' SPAN ON CONCRETE ABUTMENTS OVER WILLOW CREEK, WEST OF CLARESHOLM



THREE 20' SPANS OVER CREEK LEADING TO STEEL BRIDGE, NORTH OF CASTOR (BATTLE RIVER).

Survey No.	File No.	Description.
378-16	23442	N. W. $\frac{1}{4}$ Sec. 10 and S. W. $\frac{1}{4}$ Sec. 15, Tp. 53-7-4.
458-16	23494	W. $\frac{1}{2}$ Sec. 4 and S. W. $\frac{1}{4}$ Sec. 5, Tp. 60-17-4.
500-16	23521	W. $\frac{1}{2}$ Sec. 15 and S. W. $\frac{1}{4}$ Sec. 22, Tp. 58-13-4.
501-16	23530	S. W. $\frac{1}{4}$ Sec. 1 and S. E. $\frac{1}{4}$ Sec. 2, Tp. 58-13-4.
502-16	23528	N. E. $\frac{1}{4}$ Sec. 23, Tp. 58-13-4.
503-16	23529	N. W. $\frac{1}{4}$ Sec. 14 and S. W. $\frac{1}{4}$ Sec. 23, Tp. 58-13-4.
575-16	19265	N. E. $\frac{1}{4}$ Sec. 21 and S. W. $\frac{1}{4}$ Sec. 27, Tp. 54-5-4.
577-16	21499	E. $\frac{1}{2}$ Sec. 23 and S. E. $\frac{1}{4}$ Sec. 26, Tp. 53-5-4, also N. E. $\frac{1}{4}$ Sec. 11, Tp. 54-5-4.
580-16	23567	W. $\frac{1}{2}$ Sec. 5 and N. E. $\frac{1}{4}$ Sec. 6, Tp. 55-6-4.
581-16	23577	N. $\frac{1}{2}$ Sec. 20 and S. W. $\frac{1}{4}$ Sec. 29, Tp. 55-6-4.
600-16	23572	S. W. $\frac{1}{4}$ Sec. 8, Tp. 57-5-4.
679-16	17858-B	N. E. $\frac{1}{4}$ Sec. 35, Tp. 55-13-4.
765-16	23742	S. E. $\frac{1}{4}$ Sec. 6, Tp. 55-8-4.
771-16	21773-B	N. E. $\frac{1}{4}$ Sec. 24, Tp. 57-14-4.
197-16	21772	W. $\frac{1}{2}$ Sec. 11, Tp. 53-1-4.
82-16	23115	North half Sec. 21, Tp. 57-21-4.
468-15	22714	S. E. $\frac{1}{4}$ Sec. 13 and N. E. $\frac{1}{4}$ Sec. 12, Tp. 60-20-4, also S. W. $\frac{1}{4}$ Sec. 18, Tp. 60-19-4.
129-15	22372	S. W. $\frac{1}{4}$ Sec. 35 and N. W. $\frac{1}{4}$ Sec. 26, Tp. 58-13-4.
199-15	22447	E. $\frac{1}{2}$ Sec. 11 and S. W. $\frac{1}{4}$ Sec. 12, Tp. 54-8-4.
200-15	22445	N. E. $\frac{1}{4}$ Sec. 19 and N. W. $\frac{1}{4}$ Sec. 20, Tp. 54-8-4.
204-15	22446	N. W. $\frac{1}{4}$ Sec. 35, Tp. 53-8-4.
442-15	22570	N. W. $\frac{1}{4}$ Sec. 33, Tp. 53-8-4.
443-15	22571	West half Sec. 17, Tp. 53-8-4.
444-15	22509	S. W. $\frac{1}{4}$ Sec. 20 and S. E. $\frac{1}{4}$ Sec. 29, Tp. 53-8-4.
446-15	22340	N. E. $\frac{1}{4}$ Sec. 34, Tp. 58-11-4.
456-15	22635	Townships 56 and 57, Range 7, west 4th Meridian.
457-15	22636	To ferry site Tps. 55 and 56-8-4 and Tp. 55-9-4.
462-15	22560	S. W. $\frac{1}{4}$ Sec. 15 and N. E. $\frac{1}{4}$ Sec. 10, Tp. 54-8-4.
463-15	22556	S. E. $\frac{1}{4}$ Sec. 15 and S. $\frac{1}{2}$ Sec. 16, Tp. 54-7-4.
464-15	22555	N. E. $\frac{1}{4}$ Sec. 32, S. W. $\frac{1}{4}$ Sec. 33 and N. W. $\frac{1}{4}$ Sec. 28, Tp. 53-7-4.
466-15	22632	S. W. $\frac{1}{4}$ Sec. 33, S. W. $\frac{1}{4}$ Sec. 28 and N. W. $\frac{1}{4}$ Sec. 21, Tp. 55-7-4.
539-15	22664	N. W. $\frac{1}{4}$ Sec. 27 and S. W. $\frac{1}{4}$ Sec. 34, Tp. 58-13-4.
541-15	22663	N. E. 26 and S. E. $\frac{1}{4}$ Sec. 35, Tp. 58-13-4.
543-15	22673	N. E. $\frac{1}{4}$ Sec. 36, Tp. 55-13-4.
564-15	22788	S. E. $\frac{1}{4}$ Sec. 35 and S. W. $\frac{1}{4}$ Sec. 36, Tp. 55-13-4.
673-15	22987	West half Sec. 8, Tp. 59-11-4.
674-15	22988	S. E. $\frac{1}{4}$ Sec. 6, Tp. 61-11-4.
678-15	21138	S. E. $\frac{1}{4}$ Sec. 1 and S. W. $\frac{1}{4}$ Sec. 6, Tp. 54-3/4-4.
801-15	23006	S. W. $\frac{1}{4}$ Sec. 18, Tp. 59-20-4.
834-15	15118	S. W. $\frac{1}{4}$ Sec. 13, Tp. 59-17-4.
836-15	22998	North half Sec. 7, Tp. 60-17-4.
838-15	22772	South half Sec. 6, Tp. 59-10-4.
876-15	22852	East half Sec. 28, Tp. 53-6-4.
877-15	22853	N. E. $\frac{1}{4}$ Sec. 4, Tp. 53-6-4.
878-15	22854	N. E. $\frac{1}{4}$ Sec. 2, Tp. 54-4-4.
879-15	22850	Sec. 31, Tp. 53-6-4 and Secs. 6, 7, 8, 18, Tp. 54-6-4.
881-15	23069	N. W. $\frac{1}{4}$ Sec. 15 and S. W. $\frac{1}{4}$ Sec. 22, Tp. 54-6-4.
		NEW ROADS.
133-11	18902	Secs. 9, 10, 11, 12 and 16, Tp. 62-27-4.
235-16	20541	North half Sec. 26 and south half Sec. 35, Tp. 54-23-4.
120-15	21469	Through Secs. 5 and 8, Tp. 59-16-4.
210-15	22478	Through Secs. 28 and 33, Tp. 59-17-4.
212-15	22464	Secs. 10, 11, 13, 14 and 15, Tp. 57-6-4. and Sec. 18, Tp. 57-5-4.
298-15	22575	Secs. 6 and 7 and S. W. $\frac{1}{4}$ Sec. 18, Tp. 57-6-4.
469-15	22715	Through Sec. 31, Tp. 58-19-4.
538-15	22667	Between Secs. 4 and 9, Tp. 58-15-4.
540-15	22665	Through Secs. 8, 9 and 17, Tp. 58-13-4.
563-15	22451	Through Secs. 13 and 24, Tp. 55-7-4.
566-15	22793	Through Secs. 3, 4 and 5, Tp. 60-21-4.
125-15	22392	Between Secs. 16 and 21, Tp. 59-16-4.
22-16	17504	Through Sec. 30, Tp. 55-2-4, and Secs. 25, 35, 36, Tp. 55-3-4.
71-16	23163	Through Secs. 25, 26 and 22, Tp. 56-26-4.
107-16	23202	Through Secs. 3, 10, 4 and 9, Tp. 58-22-4.
156-16	23206	Through Sec. 6, Tp. 54-3-4.
372-16	23438	S. W. $\frac{1}{4}$ Sec. 6, Tp. 54-1-4, and Sec. 31, Tp. 53-1-4.

Survey File No.	No.	Description
457-16	23493	Through Secs. 16, 17 and 21, Tp. 57-13-4.
579-16	23575	Secs. 21, 22 and 28, Tp. 55-5-4.
596-16	22343	Secs. 25 and 36, Tp. 57-5-4, and Sec. 31, Tp. 57-4-4.
223-16	22823	N. Sec. 4, Tp. 49-11-4.

CHANGES IN SURVEYED ROADS.

226-12	14752-C	East half Sec. 22, Tp. 57-20-4.
12-15	18491	N. E. $\frac{1}{4}$ Sec. 34, Tp. 58-15-4.
16-15	15288	East half Sec. 11, Tp. 57-14-4.
114-16	17615	Secs. 4 and 9, Tp. 58-9-4.
772-16	14189	Secs. 15 and 22, Tp. 51-25-4.

EXAMINATIONS.

201-15	22450	East Sec. 36, Tp. 54-9-4.
536-15	22662	Between Secs. 22 and 27, Tp. 59-13-4.
537-15	22669	Between Secs. 19 and 20, Tp. 58-13-4.
880-15	23077	Between Secs. 26 and 35, Tp. 54-6-4.
11-16	14171	S. E. $\frac{1}{4}$ Sec. 33, Tp. 56-16-4.
270-16	23327	South half Sec. 2, Tp. 59-10-4.
576-16	19059	Between Secs. 1 and 2, Tp. 54-6-4.
578-16	22031	Between Secs. 2 and 3, Tp. 56-5-4.
599-16	22865	N. W. $\frac{1}{4}$ Sec. 31, Tp. 56-4-4.
842-15	22999	Secs. 27 and 28, Tp. 58-17-4.

Edmonton, Alberta, December 27th, 1916.

Sir:—I am attaching hereto detailed report showing the work done in my district of North Alberta during the past season.

Having organized my party I took the field on May 11th.

My first work was located at St. Albert, and from there I moved west via Spruce Grove, Golden Spike and Stony Plain, completing work in these localities and at Noyes Crossing.

I then moved north-west to Stanger, completing several pieces of work there, and proceeded to Sangudo where a considerable amount of work had been outstanding for two or three years, the most important being the survey of road along the north side of the Pembina River from Cosmo to Sangudo, including the location of ferry site.

From this point I moved north-west into the Paddle River, Peavine and Glenister district where there were also several pieces of work which had been outstanding for some time.

Moving south again to Cosmo I surveyed the road from Cosmo to Wildhorse ferry, this ferry having been moved upstream during the spring.

From Cosmo I moved south to Cherhill and Glenevis and completing work at these points crossed over via Lac Ste. Anne to Wabamun, and from there to Gainford, Magnolia and Entwistle, at all of which places surveys were made.

Having completed the work at Entwistle I received instructions for surveys needed around Hinton situated almost at the extreme west of my district, and on October 31st I shipped my outfit there via G. T. P., arriving at Hinton in a snowstorm.

At this point I surveyed road from Entrance on the C.N.R. to Hinton and from Hinton east to Bliss, also on the C. N. R. I also sur-

veyed a branch road in a southwesterly direction from Hinton up Prairie Creek. This latter road, however, might eventually be extended as the main road west towards the Yellowhead Pass if such a road is ever opened. This part of the country is not yet very thickly settled, though there are a number of trappers and guides as it is in the centre of a country abounding in big game.

The weather having turned very cold and it being inadvisable to unload my outfit at any point between Hinton and Edmonton, I shipped same to Edmonton on November 23rd and disbanded my party after arrival there on November 25th.

The season with regard to weather has been one of the worst I have experienced. The rainfall, though probably not excessive, was spread over a length of time and interfered considerably with survey operations, and more particularly the moving of camps, as some of the roads at times were practically impossible for my heavy loads.

A very considerable amount of the work this season was slow work, owing to some of the roads surveyed being along the banks of rivers, and at each section line at which ties had to be made it was not unusual to find that the mounds were on opposite sides of the river, involving the use of a boat or a long detour for some of the party to get to the other side.

Apart from these drawbacks, however, the work has progressed satisfactorily.

Your obedient servant,

P. N. JOHNSON,
District Surveyor and Engineer.

L. C. CHARLESWORTH, Esq.,
Deputy Minister, Dept. of Public Works,
Edmonton, Alberta.

NEW ROADS.

Survey No.	File No.	Description
423-13	20405	Along blind line north of Secs. 14 to 17 (inclusive), Tp. 56-5-5.
26-14	21937	Across Tp. 57-6-5 (Sangudo to Cosmo).
810-14	22123	Sec. 25, Tp. 55-6-5, and Secs. 28, 29 and 30, Tp. 55-5-5.
812-14	22206	Section 25, Tp. 56-7-5.
55-15	16190-C	Along blind line north of Sec. 18, Tp. 51-27-4.
350-15	22442	Along blind line north of Secs. 16 and 17, Tp. 58-6-5.
351-15	22719	Across Sec. 15, Tp. 58-6-5.
352-15	22720	Across Sec. 25, Tp. 57-6-5.
567-15	22800	Along blind line north of Sec. 28, 57-6-5.
613-15	22799	Along blind line north of Secs. 25 and 26, Tp. 56-6-5.
868-15	18630	Along blind line north of Secs. 25 to 30 (inclusive), Tp. 58-7-5.
53-16	23109	Along blind line north of Sec. 2, Tp. 55-1-5.
103-16	23203	Across Secs. 15, 16 and 17, Tp. 53-6-5.
104-16	23219	Across Sec. 33 and between Secs. 29 and 32, Tp. 55-6-5.
153-16	23167	Across Secs. 7, 8 and 9., Tp. 53-4-5.
321-16	23379	Across Tp. 57-5-5 (Cosmo to Wildhorse).
471-16	21096	Across Sec. 23, Tp. 56-7-5.
546-16	23553	Across Secs. 32 and 33, Tp. 55-4-5.
763-16	23743	Across Sec. 31, Tp. 50-25-5, and Secs. 4, 5 and 9, Tp. 51-25-5.
764-16	23667	Across Tp. 51, Rges. 25 and 26, W. 5th (entrance to Bliss via Hinton).
766-16	23744	Along blind line north of Sec. 2, Tp. 51-26-5.

ROAD DIVERSIONS.

Survey No.	File No.	Description
27-14	21525	Secs. 22 and 26, Tp. 57-6-5.
572-14	21955	South half Sec. 6, Tp. 54-27-4.
663-14	21936	Secs. 2 and 3, Tp. 58-6-5.
57-15	22319	East half Sec. 13, Tp. 53-26-4.
518-15	22693	Secs. 2 and 3, Tp. 53-7-5, and Sec. 34, Tp. 52-7-5.
552-15	22767	East half Sec. 9, Tp. 53-4-5.
3-16	19241	East half Sec. 3, Tp. 54-1-5.
30-16	22729	N. E. $\frac{1}{4}$ Sec. 34, Tp. 58-7-5.
109-16	22528	East half Sec. 8, Tp. 57-6-5.
251-16	23339	Secs. 7 and 18, Tp. 51-25-4.
322-16	23380	Secs. 8 and 9, Tp. 57-5-5.
367-16	23439	N. W. $\frac{1}{4}$ Sec. 23, Tp. 57-7-5.
470-16	23500	South half Sec. 6, Tp. 57-6-5.
524-16	23547	Secs. 1, 12, 13 and 14, Tp. 53-7-5.
687-16	19268	Secs. 25, 35 and 36, Tp. 53-8-5.
698-16	23670	Secs. 15, 16 and 22, Tp. 57-5-5.

CHANGES IN PREVIOUSLY SURVEYED ROADS.

508-14	15501	West half Sec. 3, Tp. 51-26-4.
669-15	22530	River Lot 64, St. Albert Settlement.
15-16	15117-D	Secs. 28 and 29, Tp. 53-6-5.
233-16	18623	Secs. 15 and 22, Tp. 57-7-5.

EXAMINATIONS.

171-14	19400	Secs. 9 and 10, Tp. 57-6-5 to Sangudo.
573-14	21939	Sec. 19, Tp. 57-4-5 (private road).
754-16	22057	Sec. 4, Tp. 56-5-5.

Edmonton, December 31st, 1916.

Sir:—I have the honour to submit the following report of the work performed by myself and party during the season of 1916 in the District of North Alberta.

I organized my party at Edmonton on May 11th and moved to Fort Saskatchewan. On completing the work there, I moved to Hobbema and surveyed a road east to the Battle River. I then worked south to Battle River and west to Springdale. From there I worked east to Wetaskiwin and on to Duhamel on the G. T. P.-Calgary branch. I then worked south along the railway to Bashaw, and moving east from there to Donalda, I worked back along the C. N. R. Calgary branch to Edmonton. The party was disbanded in Edmonton on November 30th after one of the poorest working seasons in years, as it rained all summer and all fall to Freeze-up, keeping the roads in poor condition and hindering the work in every way.

The following is a list of the surveys and examinations made.

I have the honour to be, Sir,

Your obedient servant,

E. D. ROBERTSON,

District Surveyor and Engineer.

L. C. CHARLESWORTH, Esq.,

Deputy Minister of Public Works,

Edmonton, Alberta.

ROAD DIVERSIONS.

Survey No.	File No.	Description.
209-14	21575	Diversions in Secs. 31 and 32, Tp. 44-25-4.
61-15	22333	Diversions in Secs. 2 and 11, Tp. 43-25-4.
170-15	22467	In S. W. $\frac{1}{4}$ Sec. 2, Tp. 54-21-4.
683-15	23001	In Secs. 2 and 11, Tp. 50-22-4.
44-16	22466	In East half sec. 25, Tp. 53-22-4.
140-16	22373	In Secs. 2, 11 and 14, Tp. 48-19-4.
224-16	23303	In N. W. $\frac{1}{4}$ Sec. 31, Tp. 43-27-4.
225-16	19497	In Secs. 7 and 13, Tp. 43-27/28-4.
329-16	13393	In S. E. $\frac{1}{4}$ Sec. 18, Tp. 44-22-4.
332-16	23414	In S. W. $\frac{1}{4}$ Sec. 17, Tp. 45-19-4.
335-16	23421	In Secs. 2 and 11, Tp. 54-21-4.
551-16	22495	In S. W. $\frac{1}{4}$ Sec. 4, Tp. 54-21-4.
609-16	23589	In Secs. 8, 9 and 17, Tp. 43-18-4.
636-16	23617	In S. E. $\frac{1}{4}$ Sec. 26, Tp. 42-22-4.
711-16	18768-B	In S. W. $\frac{1}{4}$ Sec. 13, Tp. 43-28-4.
712-16	23685	In Secs. 23 and 27, Tp. 43-28-4.
732-16	23707	In Secs. 35 and 36, Tp. 45-22-4.
733-16	23708	In S. W. $\frac{1}{4}$ Sec. 28, Tp. 44-1-5.
739-16	18308	In north half Sec. 35, Tp. 47-20-4.
740-16	19038	In S. W. $\frac{1}{4}$ Sec. 13, Tp. 46-19-4.

NEW ROADS.

63-15	16130	North of Sec. 3, Tp. 44-26-4.
72-15	23271	In Secs. 5 and 8, Tp. 42-21-4.
154-15	23264	Sec. 18, Tp. 45-19-4.
155-15	19305	Secs. 20, 21, 22 and 30, Tp. 42-20-4.
161-15	22366	East of Secs. 13, 24, 25 and 36, Tp. 42-21-4.
895-15	22368	South half Sec. 4, Tp. 42-21-4.
6-16	18765	Sec. 11, Tp. 43-27-4.
18-16	16291-C	Secs. 34 and 35, Tp. 45-25-4.
155-16	23023	Across Sampson and Ermine-Skin Indian Reserve.
233-16	23415	In south half Sec. 16, Tp. 44-19-4.
251-16	23309	Across Pigeon Lake Indian Reserve.
364-16	20692-B	North of Sec. 15, Tp. 44-27-4.
387-16	18109	North of Sec. 15, Tp. 45-20-4.
407-16	23462	In Secs. 19 and 13, Tp. 46-21/22-4.
514-16	23518	Sec. 25, Tp. 50-23-4.
635-16	23616	In Secs. 3, 10 and 11, Tp. 42-23-4.
653-16	22974	Sec. 6, Tp. 52-20-4.
730-16	19319	East of Secs. 10, 15 and 22, Tp. 44-22-4.
731-16	23706	North of Secs. 1 and 2, Tp. 44-22-4.

CHANGES IN SURVEY.

451-14	15833-B	Change in survey in N. W. $\frac{1}{4}$ Sec. 14, Tp. 46-19-4.
62-15	14714	Change in survey N. E. $\frac{1}{4}$ Sec. 12, Tp. 44-26-4.
685-15	18393-B	Change in survey S. W. $\frac{1}{4}$ Sec. 16, Tp. 47-18-4.
5-16	14127	Change in survey E. $\frac{1}{2}$ of Sec. 4, Tp. 54-22-4.
7-16	14125	Change in survey S. W. $\frac{1}{4}$ Sec. 2, Tp. 51-23-4.
81-16	21662	Change in survey S. W. $\frac{1}{4}$ Sec. 28, Tp. 46-24-4.
283-16	20692-C	Change in survey N. E. $\frac{1}{4}$ Sec. 21, Tp. 44-1-5.
317-16	14255-D	Change in survey N. W. $\frac{1}{4}$ Sec. 13, Tp. 46-26-4.
330-16	14339	Change in survey Secs. 2, 3 and 10, Tp. 44-22-4.
359-16	20692	Change in survey S. W. $\frac{1}{4}$ Sec. 21, Tp. 44-27-4.
402-16	17701-B	Change in survey Sec. 20, Tp. 45-22-4.
728-16	18766	Change in survey N. W. $\frac{1}{4}$ Sec. 8, Tp. 43-27-4.
729-16	18464-B	Change in survey S. E. $\frac{1}{4}$ Sec. 25, Tp. 45-22-4.

EXAMINATIONS.

326-15	22371	North of Sec. 34, Tp. 44-2-5.
684-15	22997	In N. W. $\frac{1}{4}$ Sec. 34, Tp. 49-22-4.
135-16	23221	Between Secs. 26/27, Tp. 41-18-4.
136-16	18615-B	S. W. $\frac{1}{4}$ Sec. 26, Tp. 41-18-4.
218-16	23299	N. W. $\frac{1}{4}$ Sec. 21, Tp. 55-21-4.
235-16	20541	Secs. 26 and 35, Tp. 54-23-4.
334-16	23416	Secs. 33 and 34, Tp. 45-21-4.
487-16	19623	North of Secs. 1 and 6, Tp. 43-26/27-4.

Survey No.	File No.	Description
488-16	19624	In N. E. $\frac{1}{4}$ Sec. 27, Tp. 43-27-4.
522-16	20345	In N. E. $\frac{1}{4}$ Sec. 12, Tp. 46-26-4.
741-16	23721	North of Sec. 14, Tp. 43-25-4.
755-16	23720	North of Sec. 36, Tp. 44-22-4.

RETRACEMENT.

723-16	14244	Retracement in S. E. $\frac{1}{4}$ Sec. 22, Tp. 48-20-4.
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Lethbridge, Alberta, 28th December, 1916.

Sir:—I have the honour to submit the following report respecting the work done by myself and party during the year 1916:

I was occupied in the offices at Edmonton until July 18th, when I returned to Lethbridge, while my assistant attended to office work during the winter months.

On May 2nd he went into the field with the party, commencing field work at Spring Coulee in Tp. 4-23-4. From there we worked by way of Glenwoodville to Fishburn; thence through the foot-hill country south of Pincher Creek to Twin Butte and Waterton Lakes; thence through Hill Spring across the Blood Indian Reserve to Cardston; thence through Leavitt to Mountain View; thence by way of Beazer along Lee's Creek to Cardston; thence to Kimball, Woolford, Spring Coulee, Bradshaw and Magrath; thence along the north side of Milk River Ridge to New Dayton and Etzikom Coulee in Township 6-17-4, where we completed surveys for the season.

Owing to incessant storms and lack of sufficient competent help, progress was interfered with to some extent.

I spent considerable time making examinations and locating roads in order that work of improvement might be proceeded with in advance of surveys. I also checked a number of surveys and made some new ones my party was unable to reach.

Below is a list of surveys and examinations.

Your obedient servant,

R. J. GORDON.

District Surveyor and Engineer.

L. C. CHARLESWORTH, Esq.,

Deputy Minister, Department of Public Works,

Edmonton, Alberta.

DIVERSIONS.

Survey No.	File No.	Description.
251-12	20138	In Secs. 6, 7, 18, 19-4-27-4 and Secs. 23, 24-4-28-4.
326-12	20251	In E. $\frac{1}{2}$ Sec. 27-4-28-4.
605-12	14555	In Secs. 29, 30-4-23-4.
143-13	20820	In Secs. 8, 9-5-29-4.
157-13	15562	In Sec. 27-5-29-4.
158-13	14144	In S. W. $\frac{1}{4}$ Sec. 35-5-29-4.
174-13	20882	In S. E. $\frac{1}{4}$ Sec. 4-4-29-4.
178-13	20848	In N. W. $\frac{1}{4}$ Sec. 32-2-29-4.
244-13	20893	In S. W. $\frac{1}{4}$ Sec. 36-5-29-4.

Survey No.	File No.	Description
245-13	20907	In Secs. 5, 6, 8-6-28-4.
616-13	21318	Check in Secs. 1 and 12-12-29-4.
680-13	14706	Diversion in E. $\frac{1}{2}$ Sec. 15-4-29-4 and N. E. $\frac{1}{4}$ Sec. 10-4-29-4.
157-14	21571	In Secs. 23, 26-5-29-4.
210-14	21466	Check in Secs. 25, 36-2-22-4.
431-14	21792	Diversion in Sec. 34-5-28-4 and Sec. 4-6-28-4.
566-14	21925	Diversion in Secs. 9, 10, 15, 16-6-17-4.
567-14	21926	Diversion in Sec. 27-6-18-4.
568-14	21932	Diversion in Sec. 29-6-17-4.
980-14	22090	Check in S. E. $\frac{1}{4}$ Sec. 17-14-28-4.
89-15	20608-B	In Secs. 3/10-2-26-4.
90-15	14487-L	In Secs. 1/12-5-30-4.
241-15	14547	Change in Secs. 10, 11, 13-3-26-4.
369-15	22511	Diversion in Secs. 27/28-6-19-4.
372-15	22695	In N. W. $\frac{1}{4}$ Sec. 12-5-20-4.
373-15	22700	In N. W. $\frac{1}{4}$ Sec. 33-4-27-4.
374-15	22701	In N. W. $\frac{1}{4}$ Sec. 19-4-27-4.
375-15	22716	In S. E. $\frac{1}{4}$ Sec. 26-3-29-4.
708-15	22888	In N. E. $\frac{1}{4}$ Sec. 30 and S. E. $\frac{1}{4}$ Sec. 31-5-29-4.
709-15	22939	In Secs. 20, 21, 22, 27, 34, 35, 36-2-27-4.
231-16	23215	In Secs. 5, 6, 7-5-26-4 and across the Blood Indian Reserve.
785-16	23760	Road between Secs. 4/9-6-17-4.
41-16	22427	In Sec. 29, 30, 31-9-21-4.
102-16	23204	In W. $\frac{1}{2}$ Sec. 28-2-16-4.
106-16	19006	In Tp. 2-12/13-4.
276-16	23362	In Secs. 5, 6-3-11-4.
366-16	21747	Change in N. W. $\frac{1}{4}$ Sec. 22-11-27-4.
416-16	23466	Diversion in S. W. $\frac{1}{4}$ Sec. 5-5-29-4.
417-16	23467	In Sec. 11-5-29-4.
689-16	23562	In N. $\frac{1}{2}$ Sec. 32-3-27-4.
770-16	18513	Change in N. W. $\frac{1}{4}$ Sec. 6-5-27-4.
773-16	23756	Diversion in S. W. $\frac{1}{4}$ Sec. 1-4-24-4.
774-16	14203	In E. $\frac{1}{2}$ Sec. 25-1-25-4.
776-16	15179-B	Change in E. $\frac{1}{2}$ Sec. 13-1-25-4.
777-16	23758	Diversion in S. E. $\frac{1}{4}$ Sec. 6-5-22-4.
605-12	14555	In N. W. $\frac{1}{4}$ Sec. 23-4-24-4.
778-16	14563	In Secs. 17/18-5-22-4.
779-16	23763	In south-east $\frac{1}{4}$ Sec. 17-5-22-4.
780-16	23765	In N. W. $\frac{1}{4}$ Sec. 6 and S. W. $\frac{1}{4}$ Sec. 7-5-19-4.
782-16	23767	In S. $\frac{1}{2}$ Sec. 15 and S. E. $\frac{1}{4}$ Sec. 16-6-17-4.
786-16	14560	Change in S. E. $\frac{1}{4}$ Sec. 33-1-27-4.
734-16	18527	Change in Secs. 34, 35-10-20-4.

EXAMINATIONS.

385-09	17906-09	North of Sec. 9-3-24-4.
268-12	20186	In Sec. 35-7-1-5.
84-11	18848	In Sec. 31-5-10-4.
682-13	15123	In Sec. 22-3-29-4.
331-14	21721	In Secs. 34, 35-6-10-4.
433-14	21791	In N. W. $\frac{1}{4}$ Sec. 19-5-27-4.
2-15	16101	In Sec. 2-5-28-4.
242-15	20608	N. of Sec. 3-2-26-4.
607-15	22761	In Sec. 22-7-10-4.
648-15	19395	Pits dug in Sec. 19-3-29-4.
42-16	22930	In Secs. 11, 13, 14-1-13-4.
254-16	23308	In Sec. 3-9-22-4.
252-16	20438	In Secs. 13, 14, 23-7-9-4.
403-16	23419	In Secs. 27, 28-7-1-5.
681-16	23657	In Secs. 6, 7-1-10-4 and Secs. 1, 2, 11, 12-1-11-4.
693-16	15115	In Tp. 9-23/24-4.
418-16	14251-K	For location of road around Crow's Nest Lake.
769-16	14191	In E. $\frac{1}{2}$ Sec. 15-1-24-4.
211-16	23293	In Sec. 18-5-11-4 and Sec. 13-5-12-4.
784-16	23771	In Secs. 7 to 12-1-20-4 and Secs. 11, 12, 13, 14-1-21-4.
783-16	23777	In E. $\frac{1}{2}$ Sec. 13-6-17-4.

Lacombe, Alta., December 31st, 1916.

Sir:—I have the honour to submit the following report in connection with the work done in the Lacombe Public Works District during the year 1916, and attached hereto is a schedule showing the amount of work performed, and classified as New Roads, Road Diversions and Examinations.

At the beginning of the year my time was spent in preparing the returns of the previous season's surveys as usual.

I engaged a party of married men and took the field on the 2nd day of May, and I might say that as these men were inexperienced we were not able to accomplish nearly as much work as in former years. During the month of May we were engaged in making a re-survey of the old Calgary and Edmonton trail between Red Deer and Ponoka. We then moved toward the east, making a few surveys on the way, until we reached Big Valley, where there was a number of surveys left over from last season. After completing surveys in this neighborhood we pulled across to the west side of the Red Deer River and made surveys in the vicinity of Trochu, Huxley, Elnora and Ardley. From here we moved west of Olds to attend to some special work and then worked northward toward Lacombe, thence westward to Leslieville. From this place I had intended moving to Rocky Mountain House to attend to a number of surveys that had been carried over from year to year. However, as I received instructions to attend to some urgent work west of Bowden, I moved in that direction. This was late in the fall and the balance of the season was spent in completing the re-survey of the old Calgary and Edmonton Trail between Bowden and Red Deer, and about the first of December I pulled my outfit to headquarters and disbanded.

On account of so much rain, this season as a whole has been most unfavorable for field operations. The shortage in labour also had a great deal to do with delaying the work.

The remainder of the year was spent in the office preparing plans and field notes.

Your obedient servant,

A. S. STEWART,

District Surveyor and Engineer.

L. C. CHARLESWORTH, ESQ.,

Deputy Minister, Dept. of Public Works,

Edmonton, Alberta.

NEW ROADS.

Survey No.	File No.	Location.
295-10	18416	New road in Secs. 17/20/29-43-2-5.
906-14	14635	New road in Secs. 4/9/10-43-25-4.
144-15	20911-C	New road along blind line between Secs. 30/31-35-20-4.
149-15	22350	New road in Secs. 18/13-14-34-4/5-5.
383-15	15753-B	New road in S. W. 12-38-26-4.
641-15	20911-D	New road across Sec. 26-35-20-4.
746-15	21225	New road north of N. W. 28-35-28-4.
24-16	20203	New road in centre of Secs. 25/26-34-21-4.
25-16	20038	New road in N. W. 1 and S. W. 12-40-27-4.

Survey No.	File No.	Description
92-16	23094	New road in centre of Secs. 35/36-41-5-5.
147-16	23242	New road through Sec. 3, S. W. 2 and S. E. 1-41-2-5 and N. W. 36-40-2-5.
238-16	19361	New road in Secs. 17/20-34-4-5.
264-16	23329	New road in Sec. 33-36-19-4.
320-16	16034	New road along blind line north of Sec. 16-39-3-5.
544-16	18103	New road in N. $\frac{1}{2}$ Sec. 32-34-2-5.
547-16	23557	New road south of S. E. 22-37-28-4.
568-16	15257	New road in S. W. 26-39-27-4.
651-16	14588-B	New road in N. W. 23-40-28-4.
696-16	14110-B-3	Survey of the old C. and E. Trail.

ROAD DIVERSIONS.

347-11	19173	Diversion in S. W. 2, S. $\frac{1}{2}$ 3 and N. W. 35-33/34-3-5.
634-14	22019	Diversion in S. E. 26-39-5-5.
774-14	21733	Diversion in S. W. 32-35-20-4.
904-14	17598	Diversion in S. E. 29-37-20-4.
34-15	22159	Diversion in S. W. 11-41-5-5.
36-15	22156	Diversion in N. E. 35-40-5-5.
37-15	22157	Diversion in S. W. 4-41-5-5.
38-15	22158	Diversion in N. W. 36 and S. W. 1-40/41-5-5.
328-15	19189	Diversion in E. $\frac{1}{2}$ Sec. 29-39-28-4.
366-15	20652-B	Diversion in W. $\frac{1}{2}$ Sec. 26-39-22-4.
385-15	18807	Diversion in S. W. 35-37-24-4.
382-15	22579	Diversion in S. W. 13-39-5-5.
384-15	22578	Diversion in S. W. 24-39-5-5.
389-15	22497	Diversion in S. E. 19-33-20-4.
510-15	22752	Diversion in N. W. 6 and S. W. 7-38-23-4.
511-15	22750	Diversion in N. E. 32-40-4-5.
587-15	22828	Diversion in S. E. 15-1-5-5.
722-15	22924	Diversion in S. E. 12-34-23-4.
723-15	22926	Diversion in S. W. 27-34-22-4.
724-15	22925	Diversion in N. E. 7, N. W. 8 and S. W. 17-34-22-4.
726-15	22941	Diversion in N. W. 15, E. $\frac{1}{2}$ 21, S. W. 27 and S. E. 28-35-23-4.
727-15	22942	Diversion in S. E. 28 and N. $\frac{1}{2}$ Sec. 21-35-23-4.
729-15	22944	Diversion in N. W. 17 and S. W. 20-35-23-4.
735-15	22947	Diversion in N. E. 33, W. $\frac{1}{2}$ 3 and E. $\frac{1}{2}$ 4-35/36-23-4.
738-15	20479	Diversion in S. E. 17 and N. E. 8-43-2-5.
741-15	22845	Diversion in N. W. 32-40-3-5.
742-15	22928	Diversion in N. E. 14, E. $\frac{1}{2}$ 23 and N. E. 24-36-20-4.
745-15	22877	Diversion in S. W. 34-37-25-4.
9-16	14642	Diversion in S. E. 25-40-23-4.
51-16	23100	Diversion in N. E. 13-36-20-4.
145-16	21013	Diversion in N. W. 10-41-2-5.
146-16	22270	Diversion in N. W. 2, N. E. 3 and S. W. 11-41-2-5.
157-16	23247	Diversion in N. W. 10-35-2-5.
173-16	23267	Diversion in N. E. 12 and S. E. 13-38-24-4.
174-16	23268	Diversion in N. E. 11-41-24-4.
175-16	23266	Diversion in S. E. 17-38-24-4.
176-16	23269	Diversion in N. E. 32-39-23-4.
226-16	23301	Diversion in N. E. 9-41-3-5.
227-16	23300	Diversion in S. W. 1-40-2-5.
262-16	23341	Diversion in S. E. 1-36-21-4.
265-16	23344	Diversion in N. E. 36-35-21-4.
318-16	23391	Diversion in S. W. 2-39-1-5.
319-16	23392	Diversion in S. W. 11-40-1-5.
327-16	23388	Diversion in S. E. 18-33-22-4.
340-16	21941	Diversion in W. $\frac{1}{2}$ Sec. 16-33-22-4.
381-16	23443	Diversion in N. E. 11-40-1-5.
415-16	15774-B	Diversion in S. $\frac{1}{2}$ Sec. 13-40-26-4.
553-16	15613	Diversion in N. W. 34 and S. W. 3-33/34-4-5.
647-16	15947	Diversion in S. W. 5-35-28-4.
489-16	22630	Diversion in N. E. 8, E. $\frac{1}{2}$ 7 and N. W. 8-39-15-4.

EXAMINATIONS.

511-09	18079	Examination of witness trench east of the S.E. 28-33-23-4.
524-10	18051	Examination of diversion in S. W. 29-40-26-4.
477-11	19329	Examination in S. W. 17-34-21-4.

Survey No.	File No.	Description
527-12	16173	Examination of E. boundary Sec. 11-39-7-5.
9-13	20673	Examination north of Sec. 8-34-28-4.
183-13	20810-B	Examination in S. E. 1-39-22-4.
195-16	20931	Examination of diversion in W. $\frac{1}{2}$ Sec. 27-39-7-5.
262-13	20916	Examination in N. W. 23 and W. $\frac{1}{2}$ 26-36-20-4.
267-13	20923	Examination of diversion in S. W. 29-36-21-4.
316-14	21708	Examination in N. W. 22-34-21-4.
398-14	21740	Examination in W. $\frac{1}{2}$ Sec. 21-36-22-4.
531-14	21761	Examination in Sec. 29-38-21-4.
617-14	21995	Examination in N. $\frac{1}{2}$ Sec. 17-37-21-4.
618-14	19468	Examination in Secs 6/7/8/9/15-37-21-4.
633-14	22020	Examination between Secs. 22/23-40-5-5.
829-14	22202	Examination of pits in N. W. 13, S. E. 23 and S. W. 24-35-1-5.
35-15	22155	Examination east of Secs. 25-40-4/5-5.
386-15	22678	Examination in N. W. 4-35-23-4.
586-15	22829	Examination between Secs. 8/9-41-5-5.
725-15	22940	Examination east of Secs. 17/20-35-23-4.
728-15	22943	Examination west of Sec. 36-35-23-4.
730-15	22945	Examination west of Secs. 6/31-35-36-22-4.
734-15	22946	Examination east of Sec. 22-36-23-4.
732-15	20093	Examination between Secs. 1/2-36-23-4.
739-15	22878	Examination in S. W. 33-40-24-4.
740-15	22910	Examination in S. W. 14 and N. E. 10-36-27-4.
862-15	23031	Examination in N. E. 31-34-25-4.
19-16	18206-B	Examination of wit. trench E. of S. E. 28-37-19-4.
52-16	23113	Examination north of Sec. 17-36-28-4.
86-16	15947	Examination north of Sec. 32-34-28-4.
117-16	22494	Examination of diversion in N. W. 22-39-7-5.
172-16	23273	Examination between Secs. 18/19-33-20-4.
243-16	23214	Examination in N. E. 8-35-3-5.
261-16	23340	Examination between Secs. 11/12-36-21-4.
283-16	20692-B	Examination in N. E. 21-44-1-5.
297-16	23549	Examination in Sec. 31-34-23-4.
304-16	17640	Examination in W. $\frac{1}{2}$ Sec. 3-38-18-4.
339-16	23395	Examination in S. W. 27-41-26-4.
360-16	19618	Examination of drain in Secs. 20/28/29-38-18-4.
383-16	16442	Examination in S. W. 24-36-2-5.
397-16	23356	Examination north of Sec. 13-40-27-4.
398-16	16576	Examination in N. E. 20-35-24-4.
521-16	19635	Examination in S. E. 2-40-1-5.
542-16	16280-B	Examination in Secs. 20/29-39-28-4.
695-16	23665	Examination east of Sec. 31-40-27-4.
697-16	23666	Examination north of Sec. 2-34-1-5.
744-16	23543	Examination in S. E. 24-33-21-4.

Calgary, Alberta, December 30th, 1916.

L. C. CHARLESWORTH, Esq.,

Director of Surveys,

Edmonton, Alberta.

Sir:—I have the honour to submit the following report respecting the work performed by myself and party during the year 1916.

On May 1st I organized my party and went into camp on the Sarcee Indian Reserve southwest of Calgary, where I made some surveys. I then moved northwest into the Cochrane district and completed all work west of the C. & E. railway as far north as township 28 as well as a few east of this railway in the Crossfield district. I then moved south through Okotoks, High River, Vulcan and along the Aldersyde-Kipp branch of the C. P. R. After completing all surveys as far east as Lake McGregor I moved north through Nakam, Standard and Drumheller, making a number of surveys. I

then made all surveys on my schedule north and east of the Red Deer River. I completed my season's operations in the field in the vicinity of Sunnyslope, where the weather became too unsettled for further work.

During the season I made several fly-camps to some out-of-the-way districts, where the work was too scattered and too far away to move the main camp. These, however, were not always satisfactory owing to weather conditions.

You will see from the above that I covered the greater portion of my district and still there are a large number of outstanding surveys.

Below is a list of work done.

Your obedient servant,

W. H. YOUNG,

District Surveyor and Engineer.

ROAD DIVERSIONS.

Survey No.	File No.	Description
390-16	18080	Diversion in Secs. 15 and 22, Tp. 28-25.
561-09	18123	Diversion north of Sec. 31, Tp. 22-26-4.
311-11	14181-B	Diversion Sec. 2, Tp. 21-4-5.
457-13	21182	Diversion in N. E. $\frac{1}{4}$ Sec. 36, Tp. 22-26-4.
43-14	21533	Diversion in N. E. $\frac{1}{4}$ of Sec. 24, Tp. 19-25-4.
306-14	21683	Diversion in N. E. $\frac{1}{4}$ of Sec. 12, Tp. 28-1-5.
307-14	21681	Diversion in N. E. $\frac{1}{4}$ of Sec. 10, Tp. 28-29-4.
308-14	21682	Diversion in S. W. $\frac{1}{4}$ of Sec. 30, Tp. 28-28-4.
321-14	21703	Diversion in S. W. $\frac{1}{4}$ Sec. 18 and S. W. $\frac{1}{4}$ of Sec. 17, Tp. 31-19-4.
341-14	21690	Diversion in S. W. $\frac{1}{4}$ of Sec. 28, Tp. 17-26-4.
344-14	21689	Diversion in S. E. $\frac{1}{4}$ of Sec. 36, Tp. 18-25-4, and S. W. $\frac{1}{4}$ Sec. 31 and N. W. $\frac{1}{4}$ Sec. 30, Tp. 18-24-4.
369-14	21713	Diversion in Secs. 18 and 19, Tp. 18-22-4.
370-14	21717	Diversion in N. E. $\frac{1}{4}$ of Sec. 23, Tp. 19-22-4.
422-14	21715	Diversion in S. E. $\frac{1}{4}$ of Sec. 6, Tp. 19-23-4.
424-14	21714	Diversion in Secs. 8 and 17, Tp. 18-23-4.
425-14	21716	Diversion in Secs. 33, 34, 35, Tp. 18-21-4.
485-14	21845	Diversion in S. W. Sec. 6, Tp. 19-22-4.
674-14	22027	Diversion in N. E. $\frac{1}{4}$ of Sec. 28, Tp. 19-25-4.
100-15	17518	Diversion in N. E. $\frac{1}{4}$ Sec. 8, Tp. 30-26-4.
106-15	22386	Diversion in W. $\frac{1}{2}$ Sec. 36, Tp. 15-26-4.
473-15	18455	Diversion in N. W. $\frac{1}{4}$ Sec. 31, Tp. 30-26-4.
474-15	22604	Diversion in Secs. 2, 3 and 11, Tp. 30-25-4.
476-15	22609	Diversion in N. W. $\frac{1}{4}$ Sec. 31, Tp. 31-25-4, and S. E. $\frac{1}{4}$ of Sec. 6, Tp. 32-25-4.
477-15	22603	Diversion in S. W. $\frac{1}{4}$ Sec. 4, Tp. 32-26-4.
479-15	22605	Diversion in S. E. $\frac{1}{4}$ Sec. 25 and N. E. $\frac{1}{4}$ Sec. 36, Tp. 31-27-4.
481-15	22696	Diversion in S. E. $\frac{1}{4}$ Sec. 12, Tp. 19-27-4.
484-15	22536	Diversion in Secs. 21, 28 and 29, Tp. 32-19-4.
485-15	22568	Diversion in Sec. 27, Tp. 32-19-4.
486-15	22567	Diversion Secs. 21 and 22, Tp. 32-19-4.
490-15	22499	Diversion in N. W. $\frac{1}{4}$ Secs. 23, 26, 35 and 34, Tp. 31-20-4, and Secs. 3, 10, 11, 14, 15, 22, 23 and 26, Tp. 32-20-4.
391-16	16367	Diversion in N. E. $\frac{1}{4}$ Sec. 7, Tp. 29-28-4.
392-16	14151-A	Diversions south Secs. 26 and 25, Tp. 28-4-5.
113-16	23304	Diversion in N. E. $\frac{1}{4}$ Sec. 23, Tp. 31-26-4.
171-16	23274	Diversion in N. E. $\frac{1}{4}$ Sec. 32, Tp. 31-20-4.
245-16	23311	Diversion in N. E. $\frac{1}{4}$ Sec. 5, Tp. 20-29-4.
272-16	23335	Diversion in S. E. $\frac{1}{4}$ Sec. 34, Tp. 17-28-4.
273-16	23347	Diversion in N. W. $\frac{1}{4}$ Sec. 33 and N. E. $\frac{1}{4}$ Sec. 33, Tp. 23-23-4, and S. E. $\frac{1}{4}$ Sec. 5, Tp. 24-23-4.
287-16	22533	Diversions in Secs. 34 and 35, Tp. 26-4-5.
325-16	23389	Diversion in S. E. $\frac{1}{4}$ Sec. 11, Tp. 31-22-4.

Survey No.	File No.	Description
389-16	23444	Diversion in S. E. $\frac{1}{4}$ Sec. 36, Tp. 26-4-5, and W. $\frac{1}{2}$ Sec. 31, Tp. 26-3-4.
393-16	14151-D	Diversion in Secs. 21 and 28, Tp. 28-3-5.
408-16	21477	Diversion in S. $\frac{1}{2}$ Sec. 5, Tp. 21-26-4.
466-16	23492	Diversion in S. $\frac{1}{2}$ Sec. 4, Tp. 33-20-4.
475-16	23502	Diversion in S. E. $\frac{1}{4}$ Sec. 6, Tp. 31-22-4.
487-12	20445	Diversion in S. W. $\frac{1}{4}$ of Sec. 6, Tp. 31-20-4.
494-16	23514	Diversion in W. $\frac{1}{2}$ of Sec. 13, Tp. 31-27-4.
537-16	23561	Diversion in S. W. $\frac{1}{4}$ Sec. 1, Tp. 17-24-4.
540-16	19167	Diversion in Secs. 25, 26 and 35, Tp. 19-2-5.
591-16	23592	Diversion in Secs. 30, 20 and 29, Tp. 24-23-4.
592-16	23593	Diversion in S. E. $\frac{1}{4}$ of 17, Tp. 24-23-4.
663-16	23646	Diversion in S. W. 20 and N. W. 17, Tp. 32-20-4.
737-16	23718	Diversion in Secs. 19 and 20, Tp. 32-19-4.
753-16	23735	Diversion in Secs. 4, 8, 9 and 16, Tp. 32-20-4.
756-16	18493-B	Diversion in S. W. $\frac{1}{4}$ Sec. 30, Tp. 30-25-4.
757-16	23737	Diversion in S. W. $\frac{1}{4}$ Sec. 29, Tp. 31-25-4.
758-16	23738	Diversion in N. E. $\frac{1}{4}$ Sec. 23, Tp. 30-26-4.

MISCELLANEOUS.

273-13	19561	Levels, etc., re drainage of slough in Secs. 23, 24, 25, 26, 35 and 36, Tp. 32-19-4.
274-13	19560	Levels, etc., re drainage in Secs. 11, 13, 14 and 24, Tp. 32-21-4, and Secs. 18 and 19, Tp. 32-20-4.
321-15	18838	Levels on road allowance east of Sec. 31, Tp. 19-1-5.
65-16	23157	Traverse of High River in Secs. 32, 33, 34, 35, etc., Tp. 18-29-4.
284-16	23360	Cross section and traverse of coulee in Secs. 3 and 10, Tp. 26-4-5.
606-16	18969	Cross section of railway and examination S. E. $\frac{1}{4}$ of Sec. 12, Tp. 25-23-4.
738-16	19669	Levels re drainage in Sec. 6, Tp. 31-19-4.
	2788	Cross section Saskatchewan River south of Empress in Sec. 30, Tp. 22-29-4.
	2585	Cross section Red Deer River north of Atlee in Tp. 23-7-4.

CHANGE IN SURVEY.

905-15	20278	Change in survey of road in Sec. 34, Tp. 18-2-5.
165-16	21168	Change in survey in Sec. 16, Tp. 31-21-4.
285-16	14550	Change in survey in Morley trail in Secs. 10 and 11, Tp. 26-4-5.
286-16	14747	Change in survey in trail across Sarcee I. R.
485-16	16508	Change in survey in diversion in N. E. $\frac{1}{4}$ Sec. 21, Tp. 19-25-4.

EXAMINATIONS.

221-13	20839	Examination of roads around Sec. 31, Tp. 32-18-4.
42-14	21434	Examination of survey in Sec. 13, Tp. 22-23-4.
342-14	21691	Examination of road west of Sec. 17, Tp. 17-26-4.
423-14	21718	Examination for road through Secs. 16, 21, Tp. 20-23-4.
475-15	22608	Examination re diversion in Secs. 29, 30, Tp. 31-25-4.
482-15	15469-C	Examination for road across Sec. 24, Tp. 29-1-5.
519-15	22537	Examination for road between Secs. 27/34, Tp. 31-21-4.
558-15	22760	Examination for diversion between Secs. 5 and 6, Tp. 16-24-4.
864-15	23011	Examination for diversion between Secs. 24 and 19, Tp. 21-27/26-4.
323-16	23377	Examination of blind line north of Secs. 13-18, Tp. 31-23-4.
324-16	23376	Examination of quarter line through Sec. 11, Tp. 31-23-4.
326-16	23394	Examination of blind line north of Secs. 17 and 18, Tp. 31-22-4.
337-16	23390	Examination of road allowance south of Sec. 18, Tp. 31-21-4.
410-16	14106	Examination of road allowance between Secs. 10 and 15, Tp. 21-26-4.
558-16	19638	Examination of road between Secs. 19 and 20, Tp. 30-26-4.
559-16	23573	Examination of road allowance north of Secs. 10 and 11, Tp. 30-26-4.
762-16	23719	Examination of graded road in Secs. 29, 28 and 33, Tp. 32-19-4.
	12820	Examination of road north of Tp. 17-2-5.

NEW ROADS.

Survey No.	File No.	Description
371-11	18263	Blind line north of Secs. 25, 26, 27, 28, 29, Tp. 13-24-4, and diversion in Sec. 31, Tp. 13-24-4, and in Sec. 36, Tp. 13-25-4.
549-12	20521	Road to ferry through Secs. 32 and 33, Tp. 21-25-4, and through Secs. 4 and 5, Tp. 22-25-4.
521-13	14476-C	New road in Secs. 5 and 8, Tp. 20-3-5.
36-14	21483	New road along quarter line Sec. 17, Tp. 16-23-4.
596-14	21968	New road into Namaka in S. $\frac{1}{2}$ Sec. 16, Tp. 23-24-4.
427-14	18468-B	Blind line north Sec. 30, Tp. 17-25-4.
680-14	19373	New road to Stauffer ferry in Secs. 14 and 15, Tp. 31-21-4.
860-14	22174	New road across Sarcee Indian Reserve from N. E. 36, Tp. 22-3-5.
893-14	15333	New road in Secs. 13 and 24, Tp. 28-5-5.
552-16	14498	New road into Aldersyde in Secs. 5, 6, 7, 8, Tp. 20-28-4.
506-15	20410-B	New road in N. E. $\frac{1}{4}$ Sec. 30, Tp. 14-28-4.
141-16	23250	New road into Indus in N. $\frac{1}{2}$ Sec. 35, Tp. 22-28-4.
301-16	23371	New road in S. $\frac{1}{2}$ Sec. 6, Tp. 14-23-4.
302-16	23370	Blind line road north Sec. 28, Tp. 31-27-4.
401-16	226-45	Road through Secs. 28, 33, 34, 35, 36, Tp. 20-23-4, and Secs. 31, 32 and 33, Tp. 20-22-4.
411-16	23456	Blind line road north Sec. 29, Tp. 20-26-4.
493-16	23513	New road in Sec. 24, Tp. 31-28-4.
508-16	21628	New road into Cheadle in S. $\frac{1}{2}$ Sec. 3, Tp. 24-26-4.
539-16	23560	Blind line road north Secs. 5 and 6, Tp. 16-24-4, and north Secs. 1, 2, 3, Tp. 16-25-4.
586-16	23586	New road through Secs. 34 and 35, Tp. 28-19-4.
759-16	20956	New road through Secs. 14 and 13, Tp. 30-25-4.

Medicine Hat, December 27th, 1916.

Sir:—I have the honour to submit the following report on field work of self and party during the season 1916:

I left Edmonton on May 6th by motor car and assembled party in Bassano. On May 15th we commenced survey operations from our first camp at the Douglas Ranch on the Red Deer River.

We cleaned up surveys of the Red Deer River in Rural Municipality No. 245, and then worked south to Bow River completing work en route. We moved east to vicinity of Medicine Hat on completion of surveys along Bow River and vicinity. North-east of Medicine Hat required a great many surveys, and as the party was working in that vicinity many new surveys for which I had no instructions were brought to my attention. These I made when I considered necessary.

On November 27th we quit survey work and moved the camp to Medicine Hat. On November 30th the party was disbanded and outfit stored for winter.

The season was favourable for survey work, and on the whole was very successful. Wages with the harvesting and threshing gangs were very high, and I found it difficult to get enough men. Two of the original party I had left for military service in midsummer, and the party was, therefore, handicapped for a part of the season.

I am indebted to my assistant, Mr. J. N. McDonald, B.Sc., for the willing and efficient way he did his work throughout the whole season.

Attached hereto is a summary of surveys made and examinations reported on.

Your obedient servant,

A. G. STEWART,

District Surveyor and Engineer.

L. C. CHARLESWORTH, Esq.,

Deputy Minister of Public Works,

Edmonton, Alberta.

NEW ROADS.

Survey No.	File No.	Description.
47-13	20740	In Secs. 13, 14, 15, 16, 22, 23, 24, Tp. 13-7-4.
725-14	22106	In Secs. 4 and 9, Tp. 22-13-4.
737-14	21034	Across Sec. 16, Tp. 14-1-4.
47-15	21600	Between Secs. 1/12, 2/11, Tp. 14-6-4.
197-15	22503	Across Secs. 17, 18, 13, 14 and 15, Tp. 22-12/13-4.
198-15	22502	In Secs. 5 and 6, Tp. 25-14-4.
559-15	18543	In Secs. 14, 23 and 26, Tp. 19-18-4.
560-15	22834	In Secs. 27 and 28, Tp. 15-16-4.
561-15	22833	In Secs. 11, 13 and 14, Tp. 17-17-4.
562-15	22832	In Secs. 13, 14 and 24, Tp. 18-13-4.
606-15	22334	In Secs. 27, 28, 29 and 33, Tp. 20-10-4.
115-16	23155	In Secs. 13, 14, 15, 16, 21, 22, 23 and 24, Tp. 25-15-4.
185-16	23289	Along C. P. R. right-of-way from Sec. 5, Tp. 19-15-4 to Sec. 14, Tp. 20-17-4.
229-16	23290	Along C. P. R. right-of-way from Sec. 17, Tp. 17-12-4, to Sec. 21, Tp. 16-11-4.
504-16	21686-B	In Secs. 9, 10, 11 and 12, Tp. 14-3-4.
567-16	23569	In Secs. 13, 14, 23 and 26, Tp. 20-9-4.
587-16	23540	In Secs. 4, 9 and 10, Tp. 19-18-4.
683-16	18819	In Secs. 10, 11, 28, 32 and 33, Tp. 12-1-4.
745-16	23727	In Secs. 10, 16, 21, 22 and 27, Tp. 15-3-4.
751-16	23733	In Secs. 20, 29, 31 and 32, Tp. 14-1-4.
752-16	23734	In Secs. 19, 25, 30, 31, 32, 5 and 8, Tps. 13/14-1/2-4.

MISCELLANEOUS.

484-16	14699	Re-establishment new road in Secs. 6, 19 and 30, Tp. 11-2-4.
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ROAD DIVERSIONS.

65-09	17650	In Sec. 33, Tp. 21-13-4.
95-14	21439	In S. W. $\frac{1}{4}$ Sec. 6, Tp. 18-15-4; N. W. $\frac{1}{4}$ Sec. 31, Tp. 17-15-4, and N. E. $\frac{1}{4}$ Sec. 36, Tp. 17-16-4.
97-14	21437	In the S. E. $\frac{1}{4}$ Sec. 23, Tp. 23-15-4.
683-14	22035	In the S. E. $\frac{1}{4}$ Sec. 31, and the N. W. $\frac{1}{4}$ Sec. 29, Tp. 18-14-4.
130-15	22400	In the N. W. $\frac{1}{4}$ Sec. 19, Tp. 20-10-4.
419-15	22680	In the S. W. $\frac{1}{4}$ Sec. 2, Tp. 24-13-4.
420-15	22681	In the S. E. $\frac{1}{4}$ Sec. 6, Tp. 24-13-4.
421-15	22682	In the N. W. $\frac{1}{4}$ Sec. 7, Tp. 24-13-4.
422-15	22683	In the S. $\frac{1}{2}$ of Sec. 25, Tp. 24-13-4.
438-15	22686	In Secs. 9, 16 and 17, Tp. 25-14-4.
858-15	23045	In E. $\frac{1}{2}$ of Sec. 32, Tp. 17-15-4.
215-16	23292	In Secs. 5 and 6, Tp. 22-14-4, and Secs. 8, 9 and 16, Tp. 21-14-4.
331-16	23417	In S. E. $\frac{1}{4}$ Sec. 13, Tp. 24-13-4.
506-16	23532	In the W. $\frac{1}{2}$ Sec. 34, Tp. 14-2-4.
520-16	23551	In Secs. 28 and 36, Tp. 14-4-4, and Sec. 2, Tp. 15-4-4, and Sec. 6, Tp. 15-3-4.
507-16	23533	In N. W. $\frac{1}{4}$ Sec. 8, Tp. 18-10-4.
648-16	23537	In Secs. 17 and 18, Tp. 18-18-4.
649-16	23538	In Secs. 20 and 29, Tp. 18-18-4.
650-16	23539	In Secs. 21, 27, 28, 32 and 33, Tp. 18-18-4.
670-16	23650	In Secs. 9, 10 and 22, Tp. 17-9-4.
671-16	23651	In Sec. 8, Tp. 21-9-4.
672-16	23652	In Sec. 35, Tp. 20-10-4, and in Sec. 2, Tp. 21-10-4.
673-16	23653	In the N. W. $\frac{1}{4}$ Sec. 5, and the S. W. $\frac{1}{4}$ Sec. 22, Tp. 18-9-4.

Survey No.	File No.	Description
684-16	23658	In the W. $\frac{1}{2}$ of Sec. 15, Tp. 21-9-4.
703-16	23675	In Secs. 30, 31, 25 and 36, Tp. 13-3/4-4.
704-16	23676	In the N. E. $\frac{1}{4}$ Sec. 24, and the S. W. $\frac{1}{4}$ Sec. 30, Tp. 13-4/5-4.
705-16	23677	In Secs. 23, 25 and 26, Tp. 13-3-4.
706-16	23678	In the S. E. $\frac{1}{4}$ Sec. 26, Tp. 13-8-4.
707-16	23679	In the S. W. $\frac{1}{4}$ Sec. 13, Tp. 14-3-4.
708-16	23680	In Secs. 22, 23 and 26, Tp. 14-3-4.
709-16	23681	In Secs. 21, 22 and 28, Tp. 14-3-4.
742-16	23722	In the N. W. $\frac{1}{4}$ Sec. 28, Tp. 16-1-4.
743-16	23723	In the N. E. $\frac{1}{4}$ Sec. 35, Tp. 13-2-4.
746-16	23728	In Secs. 3 and 9, Tp. 16-3-4.
747-16	23729	In the E. $\frac{1}{2}$ Sec. 6, Tp. 13-1-4.
748-16	23730	In the E. $\frac{1}{2}$ Sec. 28, Tp. 15-2-4.
749-16	23731	In the E. $\frac{1}{2}$ Sec. 4, Tp. 16-2-4.
750-16	23732	In the W. $\frac{1}{2}$ Sec. 29, Tp. 15-1-4.
761-16	22452	In the N. W. $\frac{1}{4}$ Sec. 14, and the S. W. $\frac{1}{4}$ Sec. 23, Tp. 28-2-4.
EXAMINATIONS.		
406-12	19315	Proposed road in S. E. $\frac{1}{4}$ Sec. 21, Tp. 12-10-4.
70-14	21430	Proposed road across the N. E. corner of Sec. 11, Tp. 15-13-4.
71-14	21431	Proposed road in E. $\frac{1}{2}$ Sec. 21, Tp. 15-13-4.
72-14	21429	Proposed road in Sec. 31, Tp. 14-12-4.
73-14	21428	Proposed road in N. $\frac{1}{2}$ Sec. 7, Tp. 14-12-4.
74-14	21433	Road allowance proposed to be closed in Tp. 14-12/13-4 and Tp. 15-13-4.
78-14	21411	Proposed road in Sec. 15, Tp. 14-13-4.
79-14	21412	Proposed road in N. $\frac{1}{2}$ Sec. 32, Tp. 14-13-4.
80-14	21407	Proposed road in W. $\frac{1}{2}$ Sec. 22, Tp. 16-14-4.
81-14	21408	Proposed road in S. E. $\frac{1}{4}$ Sec. 28, Tp. 16-14-4.
82-14	21406	Proposed road in the N. E. $\frac{1}{4}$ Sec. 9, Tp. 16-14-4.
83-14	21410	Proposed road in the N. E. $\frac{1}{4}$ Sec. 29, Tp. 17-16-4.
84-14	21409	Proposed road in the S. W. $\frac{1}{4}$ Sec. 27, Tp. 17-16-4.
603-15	22802	Proposed road to bridge in the N. E. $\frac{1}{4}$ Sec. 12, Tp. 7-3-4.
861-15	21890	Proposed road in Sec. 19, Tp. 5-5-4.
89-16	14524	Proposed change in surveyed road in Secs. 20 and 21, Tp. 8-4-4.
168-16	23279	Proposed road in Secs. 14, 15 and 16, Tp. 21-17-4.
186-16	23287	Proposed road from Patricia to Steveville ferry.
252-16	20438	Proposed change in surveyed road in Secs. 13, 14 and 23, Tp. 7-9-4.
424-16	19628	Road allowance west of Secs. 3 to 34, Tp. 28-9-4.
569-16	23574	Road allowance south of Sec. 4, Tp. 11-3-4.
584-16	21710	Road allowance east of Sec. 13, Tp. 12-2-4.
646-16	23630	Road allowance between Secs. 4 and 5, 32 and 33, Tps. 14 and 15-10-4, and proposed new road.
652-16	14765	Proposed change in surveyed road in Sec. 31, Tp. 8-4-4.
760-16	21119	Proposed road leading into Medicine Hat from the east.

Vegreville, Alta., Dec. 30th, 1916.

L. C. CHARLESWORTH, Esq.,

Deputy Minister of Public Works,

Edmonton, Alberta.

Sir:—I have the honour to submit the following report of the surveys made, and the other work done, in the districts of Vegreville, Vermilion, Alexandra, Wainwright, Ribstone and Coronation during the past season.

The first part of the year was spent in preparing and completing the returns of the previous season's work.

On May 1st I organized my party at Vegreville and after making various surveys in the vicinity I worked east along the north side of the Canadian Northern Railway to the 4th meridian. Here I crossed the

railway and worked south to the Battle River. I then worked west through the district on the north side of the Battle River to range 7. Here I crossed the river and worked easterly between it and the Grand Trunk Pacific to the 4th meridian. I then worked westerly along the south side of the Grand Trunk Pacific Railway as far as Wainwright. From here I worked south-easterly across country to Provost where considerable work had been forced to stand over from the previous season. Completing in this locality, I worked westward along the Saskatoon branch of the Canadian Pacific Railway to range 11, making surveys, back into the districts on both sides of the railway.

I then worked north and westerly across country to the main line of the Canadian Northern Railway and closed up the season's field operations at Vegreville on November 30th.

Throughout the municipalities and local improvement districts in the territory covered by the season's work, I find that keen interest is being taken towards the opening up and improving of new roads. The past season, however, owing to so much rain and wet weather was a great hindrance to road-builders.

The work of the past season consists of the surveying of new roads, road diversions, drains, examinations, reports and cost estimates.

The following is a list of the various work done:

NEW ROADS.

Survey No.	File No.	Description
134-15	22390	New road north of Sec. 17 and across Sec. 21-43-4-4.
391-15	22539	New road through Sec. 15-48-6-1.
396-15	22538	New road through Secs. 5 and 6-47-6-4.
399-15	22643	New road through Sec. 14-51-8-4.
402-15	22671	New road north of Sec. 14-48-11-4.
591-15	22773	New road north of Sec. 18-48-5-4.
593-15	17626-B	New road north of Secs. 1 and 2-48-7-4.
761-15	22960	New road in Sec. 13-40-7-4.
775-15	22895	New road in Secs. 22, 27 and 34-39-6-4, and Secs. 3 and 10-40-6-4.
779-15	22899	New road in Secs. 16, 17, 21, 28 and 33-39-4-4.
856-15	23039	New road in Secs. 18, 19, 20, 25, 26, 27, 28 and 29-47-5-4.
79-16	18536-B	New road through Sec. 1-51-5-4.
119-16	23229	New road through Sec. 9-51-4-4.
349-16	23407	New road in Secs. 17, 20 and 21-38-5-4.
396-16	23448	New road in Secs. 13, 14, 23 and 24-48-6-4.
453-16	23454	New road in Sec. 20-35-4-4.
583-16	15310	New road through Secs. 26 and 27-50-13-4.
618-16	23691	New road in Secs. 13 and 24-32-17-4, and Secs. 18 and 19-32-16-4.
625-16	22149	New road in Secs. 5, 6 and 7-38-4-4.
634-16	23615	New road in Sec. 9-50-12-4.
655-16	23548	New road in Secs. 13 and 24-41-8-4 and Sec. 18-41-7-4.
692-16	21484	New road in Secs. 13, 14, 23 and 24-44-5-4, and in Secs. 3, 4, 9, 16, 17 and 18-44-4-4.
713-16	15776-B	New road in Secs. 29, 30, 31 and 32-43-11-4.
714-16	23687	New road in Secs. 25 and 26-44-10-4.
715-16	23688	New road in Secs. 15 and 22-44-10-4.
721-16	22089	New road in Sec. 20-40-6-4.
573-16	23584	New road through Sec. 25-45-2-4.
445-16	23482	New road in Secs. 2, 3, 9, 10 and 11-46-11-4.

ROAD DIVERSIONS.

835-14	22129	Diversion west of Sec. 11-47-6-4.
136-15	22415	Diversion south of Sec. 15-52-1-4.

Survey No.	File No.	Description
137-15	22414	Diversion west of Sec. 6-51-1-4, and east of Sec. 1-52-2-4.
397-15	22638	Diversion west of Sec. 13-50-9-4.
398-15	22639	Diversion south of Sec. 13-51-9-4.
400-15	22640	Diversion east of Sec. 32-50-7-4.
401-15	22641	Diversion west of Sec. 23-52-7-4.
412-15	22670	Diversion across Sec. 11-47-11-4.
413-15	22647	Diversion north of Sec. 32-44-1-4.
414-15	22648	Diversion west of Sec. 18-44-1-4.
415-15	22649	Diversion east of Sec. 34-43-1-4.
416-15	22650	Diversion west of Secs. 25 and 36-43-1-4.
417-15	22651	Diversion north of Sec. 36-42-3-4.
523-15	22577	Diversion east of Sec. 35-50-11-4.
589-15	22774	Diversion west of Secs. 30 and 31-48-6-4.
592-15	22798	Diversion in Secs. 10, 11, 14 and 15-49-7-4.
598-15	22757	Diversion north of Sec. 35-52-13-4.
748-15	22973	Diversion east of Secs. 4, 9 and 16-45-1-4.
749-15	22971	Diversion south of Sec. 14-45-3-4.
750-15	22970	Diversion east of Sec. 19-45-3-4.
751-15	22969	Diversion south of Sec. 29-45-3-4.
754-15	22966	Diversion west of Sec. 1-46-2-4.
755-15	22965	Diversion north of Sec. 9-46-2-4.
756-15	22964	Diversion west of Secs. 3, 10 and 15, and east of Sec. 9-46-2-4.
757-15	22963	Diversion west of Secs. 11 and 12-47-3-4.
758-15	22962	Diversion west of Sec. 13-46-3-4.
759-15	22961	Diversion west of Sec. 35-47-1-4.
760-15	22957	Diversion east of Sec. 2-46-1-4.
769-15	22892	Diversion west of Sec. 2 and east of Sec. 3-42-1-4.
777-15	22897	Diversion west of Sec. 34-38-4-4.
778-15	22898	Diversion north of Secs. 31 and 32-39-4-4, and south of Sec. 5-40-4-4.
780-15	22900	Diversion east of Sec. 19-38-6-4.
782-15	22902	Diversion east of Sec. 9-39-6-4.
783-15	22903	Diversion west of Sec. 3-39-6-4.
784-15	16120	Diversion west of Sec. 8-47-7-4.
785-15	22905	Diversion west of Sec. 27-38-6-4.
786-15	22904	Diversion west of Sec. 24-38-6-4.
787-15	22906	Diversion west of Secs. 15 and 22-38-6-4.
789-15	22908	Diversion north of Sec. 12-40-5-4.
795-15	22869	Diversion east of Secs. 30 and 31, and west of Sec. 29-45-11-4.
837-15	23047	Diversion into Sec. 1-53-13-4 and into Sec. 6-53-12-4.
850-15	23030	Diversion south of Sec. 18-40-7-4.
873-15	23081	Diversion south of Sec. 5-45-2-4.
97-16	23196	Diversion north of Sec. 19, and south of Sec. 30-47-11-4.
161-16	23190	Diversion north of Sec. 10-44-12-4.
163-16	22036	Diversion south of Sec. 25-43-11-4.
178-16	23278	Diversion across Secs. 5, 6, 7, 8, 18 and 19-46-3-4, and across Sec. 31-45-3-4.
182-16	23257	Diversion north of Sec. 19-52-16-4.
236-16	20654	Diversion north of Secs. 8, 9, 10, 12, 13, 16 and 17-43-1-4.
249-16	23334	Diversion east of Secs. 1, 13 and 24-45-5-4, and west of Sec. 31-44-4-4, and west of Secs. 6 and 7-45-4-4.
275-16	23350	Diversion into Sec. 27-52-13-4.
305-16	21285	Diversion south of Secs. 29 and 30-43-2-4.
306-16	23375	Diversion east of Sec. 3-43-1-4.
307-16	23373	Diversion north of Sec. 19-42-2-4.
308-16	23374	Diversion into Secs. 13 and 14-43-1-4.
312-16	23385	Diversion west of Sec. 6-52-6-4.
313-16	23383	Diversion east of Sec. 9-50-6-4.
314-16	23384	Diversion west of Sec. 19-52-6-4.
328-16	23387	Diversion east of Sec. 35-49-12-4.
342-16	23400	Diversion south of Sec. 16-40-4-4.
343-16	23405	Diversion west of Sec. 3-38-5-4.
344-16	23422	Diversion east of Sec. 7-39-5-4.
345-16	23404	Diversion west of Sec. 2-38-5-4.
346-16	23411	Diversion east of Sec. 4-38-6-4.
347-16	23406	Diversion north of Sec. 9-38-5-4.
348-16	23410	Diversion north of Secs. 31 and 32-39-5-4.
350-16	23408	Diversion into Secs. 19, 29 and 30-38-5-4.
351-16	23412	Diversion west of Sec. 34-38-6-4.

Survey No.	File No.	Description.
352-16	23398	Diversion west of Secs. 25 and 36-48-4-4.
353-16	23399	Diversion west of Sec. 24-39-4-4.
354-16	23409	Diversion south of Sec. 18-39-5-4.
355-16	23402	Diversion west of Sec. 17-40-4-4.
357-16	23401	Diversion east of Sec. 32-40-4-4.
358-16	23418	Diversion east of Sec. 30-41-3-4.
361-16	20175-B	Diversion west of Secs. 12 and 13, and east of Sec. 11-47-7-4.
365-16	17766	Diversion west of Secs. 21 and 28-51-8-4.
382-16	23332	Diversion east of Secs. 25 and 36-42-4-4.
384-16	23076	Diversion east of Sec. 1-44-9-4.
385-16	23440	Diversion west of Sec. 10, and north of Secs. 8 and 9-44-10-4.
399-16	23451	Diversion west of Sec. 23-47-4-4.
400-16	23452	Diversion north of Sec. 8-51-5-4.
414-16	18723-B	Diversion east of Secs. 5 and 8-43-11-4.
444-16	23483	Diversion east of Secs. 14 and 23-45-11-4.
454-16	23463	Diversion into Secs. 13, 14, 23 and 25-46-12-4.
473-16	23496	Diversion east of Sec. 34-40-5-4.
531-16	23544	Diversion east of Sec. 23-44-10-4.
535-16	23555	Diversion east of Secs. 25 and 36-46-2-4.
555-16	20707	Diversion west of Secs. 1 and 12, and east of Sec. 11-45-11-4.
557-16	23563	Diversion north of Sec. 8-45-11-4.
574-16	23585	Diversion south of Secs. 1 and 2-45-1-4.
613-16	23578	Diversion south of Secs. 28, 29 and 30-39-3-4.
615-16	23598	Diversion north of Sec. 9-40-3-4.
616-16	23607	Diversion north of Sec. 33-39-5-4.
624-16	22004-B	Diversion west of Secs. 30 and 31-39-4-4.
627-16	23609	Diversion east of Sec. 15-40-5-4.
628-16	23610	Diversion east of Sec. 7-39-4-4.
716-16	23689	Diversion west of Secs. 13 and 24-43-11-4.
717-16	23690	Diversion south of Sec. 13-43-11-4.
726-16	18405	Diversion south of Sec. 17-44-11-4.
735-16	23189	Diversion east of Secs. 24 and 25-44-11-4, and west of Sec. 30-44-10-4.
617-16	20406	Diversion east of Secs. 11 and 14-43-4-4.

EXAMINATIONS ETC.

250-14	21610	Examination and report re blind line north of Secs. 13 to 18-46-12-4.
724-14	22058	Examination and report re road south from Kirriemuir.
21-15	21129	Examination and report re road across Sec. 34-43-5-4.
276-15	22585	Examination and report of road west of Sec. 31-50-16-4.
392-15	22540	Examination and report re road east of Sec. 16-48-6-4.
395-15	22741	Examination and report re road north of Sec. 34-52-11-4.
596-15	22771	Examination and report re road east of Sec. 21-47-4-4.
601-15	22839	Examination and report re road north of Sec. 12-47-7-4.
747-15	22972	Examination and report re road south of Sec. 5-45-3-4.
768-15	22929	Examination and report of road in Sec. 18-35-4-4.
85-16	23188	Examination and report re road on blind line north of Sec. 1-47-2-4.
118-16	23220	Examination and report re road north of Kirriemuir.
121-16	23239	Examination and report re road on blind line north of Sec. 30-41-5-4.
179-16	23277	Examination and report no survey required in Sec. 10-46-3-4.
309-16	23372	Examination and report re road in Sec. 35-42-2-4.
222-16	23251	Examination and report no survey required south of Sec. 13-49-11-4.
434-16	23455	Examination and report re road in Sec. 6-35-4-4.
435-16	23453	Examination and report re road south of Secs. 15 and 16-36-4-4.
443-16	23484	Examination and report re road east of Sec. 17-45-11-4.
565-16	23568	Examination and report re road east of Sec. 20-36-4-4.
701-16	23603	Examination and report re roads in Secs. 1 and 12-40-8-4.
718-16	23692	Examination and report re road in Sec. 32-41-1-4.
767-16	22069	Examination and report re road in Sec. 33-43-11-4.
768-16	21197	Examination and report re road in Sec. 6-50-12-4.
14000		Examination and report re roads in Secs. 16, 21 and 22-37-9-4.

DRAINS AND LEVELS.

Survey No.	File No.	Description
570-16	19639	Reported and staked out drain in Secs. 23 and 26-42-4-4.
688-16	19646	Surveyed drain in Sec. 28-46-13-4.

Progress reports and sketches were forwarded to the Department at the time the surveys and examinations were made.

A number of plans and final returns have already been forwarded to the Department, the remainder are now in course of preparation.

Your obedient servant,

LENNOX T. BRAY,

District Surveyor and Engineer.

ARCHITECTURAL BRANCH

Edmonton, January 16, 1917.

L. C. CHARLESWORTH, Esq.,

Deputy Minister of Public Works,

Edmonton.

Sir:—I beg to report on the work performed by the Architectural Branch during the year 1916.

The amount of new work performed during this year has been much less than that during any other year of this branch's existence, but the general routine has been much increased, owing to the fact that the general repair and maintenance of all the Provincial Buildings has been placed directly under the supervision of this branch.

The work performed has been carefully considered and economically carried out. The costs have been carefully recorded and tabulated for reference.

The supervision of work during erection has been carried out by Mr. McDonald, the General Building Superintendent, and such personal inspections as have been necessary I have made.

The work performed by the branch is described in detail as follows:

PONOKA ASYLUM.—Plans, specification and details were prepared for the erection of a new kitchen and bakery building at Ponoka Asylum. This addition was necessary owing to the increase in the number of patients at the institution. The addition was designed to fit into the space between the rear of the old kitchen and the power house, and was arranged to provide easy access from the communicating corridors and thence to the various buildings of the institution.

The building is designed in two stories. On the lower floor is the bakery, containing two ovens, with flour, bread and fuel stores within easy access. On the upper floor, which is level with the main floors of the institution, is the kitchen, which is a large room containing the ranges and various steam and electrical cooking appliances. In connection with this room is provided also, a scullery, vegetable cleaning room, pantry, cold storage rooms and a large service room for the distribution of the prepared food for the various buildings. The building, placed as it is within easy access of all parts of the institution, is yet cut off from same by communicating corridors, and should result in greater efficiency, and will also eliminate the possibility of any odours from the cooking finding their way into the other buildings.

The building is of the most modern construction in every way and very great care has been taken to provide a building of a strictly sanitary nature. The construction is also strictly fireproof throughout. The work in connection with the building also provided for certain changes in the old kitchen, to provide for a staff dining room.

Tenders were called for the construction of the building, and contract awarded to the lowest bidder, construction being commenced in July, 1916.

Progress on the building has not been as rapid as could be wished, owing principally to the difficulty in securing material, also to a great lack of skilled labour. It is hoped, however, that the building can be turned over completed, to the institution, at the end of January.

Plans, specification and details are in course of preparation for the proposed new male block. This building will provide accommodation for 400 male patients and will be strictly modern in every respect. The work has been well advanced and, should it be considered necessary, tenders could be called for on the work in the very near future. I am of the opinion, however, that it will not be advisable to proceed with the construction of this building in the near future if accommodation for the patients can be provided in some other way. The cost of building material at the present time is exceptionally high and will no doubt continue to rise. Also, the extreme scarcity of skilled labour will be a serious matter to contend with in the erection of this building.

The work in the boiler room and power house has proceeded in a satisfactory manner; the installation of two (2) Babcock & Wilcox boilers was completed; also, the installation of a water softening plant and reservoir.

The plant is giving excellent service and is not only supplying light, power and heat to the institution, but also supplying light to the town of Ponoka.

FORT SASKATCHEWAN GAOL.—The water supply at this institution was completed in a satisfactory manner and is giving excellent service. This supply is obtained from the Saskatchewan river, a pumping station being provided at the river bank, the plant in which consists of an electrically-driven centrifugal pump, with an auxiliary steam pump and boiler. Water is pumped to a sedimentation basin at a higher level; this basin consists of four (4) tanks which provide for a complete sedimentation of solid matter held in suspension in the water. After a period of settling the water is pumped by a large electrically-driven pump to the water tank and during this operation a small quantity of liquid chlorine is added, by means of a proper apparatus, to sterilize the supply. The water then passes into the building through two pressure filters, which complete the purification.

The whole system is now giving entire satisfaction under all conditions.

The power plant is giving satisfactory service and provides light, power and heat to the institution. The main building has been kept in a proper state of repair by the staff of this department.

A good deal of work has been done around the institution in removing and re-modelling the old buildings of the R.N.W.M.P. barracks. Modern horse and cow stables have been provided, using these old buildings as the shells and providing new floors and stalls. The buildings have also been provided with necessary light and water service. This work has been performed principally by prison labour under the supervision of a foreman employed by this department.

LETHBRIDGE GAOL.—Buildings at this institution have been kept in a proper state of repair and power house has been run in a most satisfactory manner, giving all the necessary service.

A garage building was erected for the accommodation of the autos used by the institution. Certain repairs were performed on the water tower and same was re-painted.

LETHBRIDGE COURT HOUSE.—Some minor alterations were performed on this building to improve the accommodation of the sheriff's and district judge's rooms. The building has been kept in a proper state of repair.

MEDICINE HAT COURT HOUSE.—Some alterations were performed in this building to provide room for the district judge, work being performed in a satisfactory manner.

RED DEER COURT HOUSE.—Court House accommodation was provided at this point by the leasing of a factory building in January last, the interior arrangements being re-modelled to provide accommodation for Court offices on the first floor and a convenient Court Room on the second floor. The work was performed under the direction of this branch by day labour.

PARLIAMENT BUILDINGS.—Some minor repairs have been performed on these buildings, also some alterations with a view to meeting the demand for accommodation of the various departments.

A good deal of new work has been performed on the grounds, the old Hudson's Bay Fort buildings being removed and the ground cultivated with a view to other work in 1917. On the site of the old buildings a bowling green was constructed and sown, and it is expected will be in condition for use in the summer of 1917.

Other work on the grounds consisted of the planting of trees and the construction of a boulevard immediately in front of the buildings. Several changes were made in the water lines in the vicinity of the buildings with a view to providing better fire protection, and also to supply water service to the grounds.

TERRACE BUILDING.—This building has been maintained in a proper manner and some minor alterations performed with a view to meeting the increased demand for accommodation; the school library branch of the Education Department having been provided with accommodation in the basement which was made possible by the erection of the building for moving picture censorship purposes.

MOVING PICTURE BUILDING.—This building is a small fire-proof brick structure to accommodate the necessary machine for the projection of moving pictures for censorship. It consists of a theatre, and lantern room of a strictly modern type in accordance with the fire underwriters' requirements. The building is designed with a view to the addition of another story when required, to provide accommodation for the Censor's clerical staff.

PARLIAMENT BUILDINGS POWER HOUSE.—The power house has been run in an efficient manner and has provided satisfactory service to the Parliament and Terrace Buildings. A steam line has been laid from the power house to the Terrace building to provide heat to that building, and the other buildings adjoining, from the central plant.

There is no doubt that this installation is a decided advantage and economy.

GOVERNMENT HOUSE.—Plans, specification and details were prepared for a new green-house to be erected near the garage and stables. Construction of the building was proceeded with by day labour, tenders being called for on the heating and contract awarded to the lowest bidder. Work has been completed in a satisfactory manner and the building is now in use. This allows the conservatory in connection with the house to be used for its legitimate purpose. The interior of the conservatory was thoroughly overhauled and re-painted and the necessary furnishings provided.

In connection with the house a mechanical cold storage plant has been provided in the basement adjoining the kitchen, thus providing a great improvement in the service arrangements of the residence. General repairs and maintenance of the house have been provided as necessary.

A good deal of new work has been performed on the grounds. At the south of the house three (3) bowling greens have been constructed; two (2) croquet courts and an additional tennis court. Trees were planted and flower beds laid out, making a most pleasing and attractive spot. The grounds to the north of the house have been ploughed and cultivated, preparatory to carrying out additional improvements in 1917, designs for which are in course of preparation by this branch.

INSTITUTE OF TECHNOLOGY, CALGARY.—Accommodation was provided for this institution in the Col. Walker School and the East End fire hall, Calgary, these two buildings having been placed at the disposal of the Provincial Government by the Calgary School Board and the City of Calgary.

A good deal of alteration work was necessary in both buildings to adapt them for the use of the institution. The school building has been arranged to provide the necessary lecture rooms and laboratories, and the fire hall provides accommodation for the machine shop and wood-working departments. The whole of the necessary equipment for the institution has been purchased through this branch, tenders being called for the supply of this equipment. The alterations to the buildings have been completed and a greater part of the equipment has already been installed.

In connection with this building a good deal of special furniture was required, and fittings for the laboratories. Practically the whole of this equipment has been constructed in our own shop.

CAMROSE NORMAL SCHOOL.—This building has been kept in a good state of repair. Tinting of the class rooms was proceeded with and completed in a satisfactory manner. Additional furniture was provided for class rooms. Drawings and specification were prepared for laying out of grounds, fences, etc. Tenders were called for on this work and the work completed in a satisfactory manner.

RURAL AND VILLAGE SCHOOLS.—In connection with the erection of Rural and Village Schools throughout the Province, the services of this branch have been used in an advisory capacity. Correspondence in this connection comprises some 160 letters, most of which are in the nature of reports on plans submitted through the Department of

Education for new school buildings. Preliminary sketches submitted have been advised upon and in some instances sketch plans have been prepared as suggestions applicable to the particular requirements of the site and other local conditions. Plans submitted during this year include a number of the large consolidated schools. Inspections of a number of school buildings have been made on request, in order to ascertain that full performance of the contract has been effected, and that the school building regulations have been complied with.

Besides the work described in detail above, general repairs have been effected of a similar nature in many of the other buildings under the care of this branch. The whole of these properties have been kept in good condition. All the necessary supplies required for the maintenance and repairs of the various buildings have been purchased by this branch.

The following is a statement of the expenditure and revenue of this branch for the year:

EXPENDITURE.

Maintenance of Legislative and Departmental Buildings—

(a) Chargeable to Income	\$274,888.07
(b) Chargeable to Capital	23,872.03

Maintenance of Government House—

Chargeable to Income	15,374.10
Govt. House alterations, additions, furnishings and laying out grounds	9,375.26

Parliament Buildings—

Alterations to building and new work on grounds	7,858.79
Stock for buildings	11,907.46

Court House, Calgary—

Alterations and furnishings	1,538.16
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Court House, Red Deer—

Alterations to factory buildings and furnishings	2,423.61
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Court House, Stettler—

Work on grounds	392.25
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Camrose Normal School—

Additional equipment, laying out grounds and fencing	4,373.63
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Carpenter Shop, Edmonton—

Erection of new building	6,634.34
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Ponoka Asylum—

Kitchen and bakery addition, additions to power house equipment, water and gas wells	76,742.73
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Agricultural School—

Alterations, and erection of water tank at Olds	4,127.23
Completion of live stock building	1,972.12

Fort Saskatchewan Gaol—

Completion of water supply and alterations to old buildings	8,764.64
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<i>Institute for Feeble-minded Children, Red Deer</i>	
Purchase of Ladies' College building and site.....	124,500.00
<i>Moving Picture Building, Edmonton—</i>	
Construction	1,632.03
<i>Construction of Buildings and Payment of Sites at Ponoka,</i>	
<i>Lethbridge and Camrose</i>	<i>15,853.29</i>
<i>Institute of Technology, Calgary—</i>	
Alterations to buildings and purchase of equipment	28,900.67
Total Expenditure	\$621,131.46

REVENUE.

<i>Lethbridge Gaol Power Plant—</i>	
Electric light supplied to outside customers.....	\$ 168.96
Water supplied to outside customers.....	154.75
Fees for use of Government siding.....	128.50
<i>Provincial Asylum, Ponoka—</i>	
Electric light supplied to Town of Ponoka.....	2,923.27
Coal supplied to employees.....	246.07
Sale of old boiler.....	500.00
<i>Court House, Red Deer—</i>	
Refund from Messrs. Gaetz on alterations to Court	
House	1,000.00
<i>Practical School No. 2, Calgary—</i>	
Refund on installation of heating plant.....	275.00
Sundry refunds on rents.....	150.00
Sale of sundry material and plant no longer required..	1,747.85
Total Revenue	\$7,294.40

I have the honour to be, Sir,

Your obedient servant,

R. P. BLAKEY,

Provincial Architect.

THE MINES BRANCH

Edmonton, February 15th, 1917.

L. C. CHARLESWORTH, Esq.,

Deputy Minister of Public Works,

Edmonton, Alberta.

Sir,—In accordance with the provisions of The Mines Act, I herewith submit the report of the Mines Branch for the year ending December 31st, 1916.

For the purpose of giving more detailed information regarding the production of coal and the number of men employed in various localities, you will note the province has been divided into thirty-four separate districts instead of four as in previous reports. It was considered advisable to do this as a number of new districts have been opened up in recent years, and it is interesting to note the progress that is being made in each district.

Several small mines have been opened in the Peace River district and although these mines are operated on a small scale at present, it is probable that with the increased settlement that is taking place in the district north of Edmonton, these mines should be fairly large producers in the near future.

It will be noted from the following tables that the output of coal for the year 1916 exceeded that for the year 1915 by 1,213,713 tons, thus establishing a record output for the province. Notwithstanding the increased output, however, it will also be noted that 2,910,576 tons of coal were imported during the year 1916 into the territory lying between Port Arthur and the western boundary of Alberta. As I have already stated in previous reports this imported coal is being consumed in territory which, in my opinion, should be supplied by the production from the mines situated in the Provinces of Alberta and Saskatchewan. Although a larger amount of coal was shipped last year to Saskatchewan and Manitoba than in previous years, I am of the opinion that even with the present freight rates a much larger market could be obtained in these provinces than we have at present.

Mr. Samuel A. Jones resigned his position on February 10th, 1916, as District Inspector of Mines, and Mr. Duncan McDonald and Mr. Moses Johnson were appointed District Inspectors of Mines on July 1st, 1916.

During the year a number of samples of mine air were taken by officials of the department and forwarded, for the purpose of analysis, to the laboratory conducted by the Federal Government at Ottawa. The result of these analyses has been interesting and instructive and has been the means of assisting us to form an opinion as to what should be done to insure greater safety in gaseous mines. I am pleased to report that the mine operators in every instance have co-operated with the inspectors in this connection with the result that the conditions of these mines, as far as safety is concerned, have been

greatly improved and everything that can be done with this end in view is being put into effect.

Interesting information is also being obtained regarding the qualities of the different coals in the province. Samples of these coals are taken by inspectors and forwarded to the Fuel Testing Station at Ottawa to be analysed. The results of these analyses will be found in the following tables.

During the year instruction in mining, chiefly by correspondence, was commenced at the Institute of Technology, Calgary, under the supervision of Mr. W. A. Davidson, formerly manager of the International Coal & Coke Co., Ltd., Coleman. This instruction is already having good results and a large number of candidates for certificates under The Mines Act are availing themselves of the opportunity offered.

In order to overcome certain difficulties experienced by the operators of small mines, provision has been made whereby it is not necessary for the workings of these mines to be surveyed every three months, thus saving the operators what appears to be, to a certain extent, unnecessary expense.

A decided improvement has taken place regarding the plans of the workings of mines since the regulations affecting these plans were put into effect on June 8th, 1915.

On July 1st, 1916, competitions in First Aid and Mine Rescue Work were held at Coleman under the auspices of the Rocky Mountain Branch of the Canadian Mining Institute. These competitions were quite successful and have had the result of stimulating interest in this important work.

The Rocky Mountain Branch of the Canadian Mining Institute, formed in 1912, which covers Alberta and Eastern British Columbia, and gets financial assistance from the Government of the Province of Alberta, is proving of great benefit to mining men in that territory as it gives them an opportunity of meeting and discussing technical points of interest in mining.

Wages paid to mine employees were practically the same on December 31st, 1916, as at the end of the year 1915, except that a war bonus was put into effect on August 16th, 1916.

The District Inspectors of Mines have visited the mines in the districts under their charge at different intervals throughout the year and have investigated all fatal and serious accidents which have occurred and in addition have attended all inquests.

Very few complaints were received from employees or others during the year; most of these complaints were anonymous but all have been attended to and investigated. Although some were exaggerated, a number were well founded and served the useful purpose of bringing attention to irregularities which have since been remedied.

A decided improvement has taken place in connection with the number of accidents which have occurred during the year. It will be noted from the following tables that more tons of coal per fatal accident were produced during 1916 than during any previous year with the exception of the years 1909 and 1911. The reason for the good showing during these years was that a number of the most dan-

gerous mines were idle for a considerable period during each of these years owing to labor troubles. It is also gratifying to note that no lives have been lost through gas or coal-dust explosions.

Considerable progress has been made in connection with training in Mine Rescue and First Aid Work during the year. Mine Rescue Cars have been installed in districts where there are a number of mines in close proximity to each other such as the Crow's Nest Pass, Canmore and Drumheller. Where there is only one mine to be taken care of, such as Lethbridge, Coalhurst, Commerce, Brazeau and Jasper Park, stations were installed. The cars, which are each provided with sleeping accommodation for twelve men, visit all the mines in the district each month and are kept in constant readiness to proceed immediately to the scene of a catastrophe. Each car and station is under the care and supervision of a qualified superintendent who devotes his whole time to training men and keeping the apparatus in order so that it can be put into immediate use at any time. Two teams composed of five men each are maintained at each mine so that their services can be obtained should occasion arise. While engaged in training, the men are paid at the rate of fifty cents per hour, each man being required to undergo 8 trainings of 3 hours each after which he is required to take one training each month so as to keep him in a state of efficiency. The Government has also arranged that any person meeting with an injury while doing mine rescue work will be compensated in the same manner as provided for by the Workmen's Compensation Act. It is intended when consistent with efficiency that only returned soldiers will be appointed in future as Superintendents of Mine Rescue Stations and Cars. Two returned soldiers have already been appointed to these positions. Over 500 men have been fully trained in the use of the apparatus, and this number is continually being added to.

With reference to gasoline locomotives underground it is proposed during the present year to pass regulations prohibiting their use.

There are 5395 safety lamps in use in the Province. Of these 3749 are of the Wolf type, 204 of the Koehler type, 287 of the Clanny type, 505 of the Edison type, 600 of the Wico type and 50 of the Ceag type. The Edison and Wico types are electric cap lamps and the Ceag type electric hand lamps. The Edison electric cap lamps have been provided in a number of cases for men engaged in transportation and for miners engaged in the extraction of pillars.

Readings of the relative humidity of the air in dusty mines are being taken periodically by the inspectors, the results showing that the percentage of humidity ranges from 86 per cent. to 100 per cent.

In order to prevent as far as possible the propagation of explosions, inert dust barriers have been installed in several bituminous coal mines. These barriers extend from 175 ft. to 200 ft. in length and consist of shelves eighteen inches to twenty-four inches wide with spaces of twenty-four inches between them. These shelves are loaded with incombustible dust taken from the combustion chambers of steam boilers, the analysis of this dust showing that it is very satisfactory for this purpose.

The triple entry and panel systems of working are being generally adopted throughout the bituminous mines with satisfactory results.

I regret that it has been again necessary to prosecute a number of officials and other employees for contraventions of The Mines Act.

Arrangements are being made in the Taber field with a view to changing the present method of mining from room and pillar to the long wall advancing method. It is expected that by doing this a larger percentage of lump coal will be obtained.

During the year a number of explosives were experimented with in the Lethbridge field with the following results:

<i>Name of Powder.</i>	<i>Result of Test.</i>
Bentol No. 2.	Obnoxious fumes.
Polar Brushite.	Obnoxious fumes.
Carbonite	Too weak to break the bone properly.
Coalite No. 2.	Freezes too easily.
Coalite L.F.	Satisfactory but too expensive.
Hercules No. 1.	Too quick, shatters the coal.
Robinite	Too weak, needs so much powder to break the bone that it costs too much per ton of coal.
Bull-dog	Very satisfactory but unobtainable on account of the war.

The principal development in the province during the last year has been in the Drumheller district, where a considerable amount of underground development has been done and a number of new plants erected.

There were 282 mines in operation during the year 1916. Of these two were operating copper ore, one shale and 279 coal. Operations were stopped at the copper ore mines several months ago and have not been resumed. The shale mine during the year 1916 produced shale from which 200,000 bricks were manufactured.

The following table shows the amount of natural gas consumed in the Province for the years 1911 to 1916 inclusive, according to the Summary Report of the Mines Branch of the Department of Mines, Ottawa. According to the same report a small quantity of crude oil has also been produced in the Province, but no figures are available as to the exact production.

<i>Year.</i>	<i>Gas.</i>
1911.	780,000,000 cubic feet
1912.	2,583,437,000 " "
1913.	7,030,000,000 " "
1914.	7,172,157,000 " "
1915.	4,481,947,000 " "
1916.	6,818,131,000 " "

On October 1st, 1916, an order in council was passed regulating the operation of mining coal under road allowances in the province. Although these regulations have only been in effect a short time they are proving of considerable benefit in allowing the workings of a mine to cross under a road allowance from one property to another when desired. This permission is only granted, however, where the surface would not be damaged by operations. The following are the regulations which are in effect:

1. No coal shall be mined under any road allowance unless a lease has been granted as herein provided for.

2. All applications for the acquirement of coal mining rights under the terms of these Regulations must be made on forms supplied by the Minister of Public Works.

3. Coal mining rights will be leased for a period stated in the lease, but in no case to exceed twenty years, the lease being renewable for a further period at the discretion of the Minister of Public Works.

4. The terms and conditions contained in the lease when executed are in all cases to govern.

5. The boundaries beneath the surface of a road allowance shall be the vertical planes or lines in which the surface boundaries lie.

6. The application must be accompanied by a payment of \$5.00 as rental up to the thirty-first day of December of the current year, for the area applied for, which amount will be returned to the applicant if the application is not accepted.

7. If the application for lease is approved, the applicant will be notified in writing and a lease in a form prescribed by the Minister of Public Works bearing the date from the day upon which the application is approved, shall be issued.

8. In addition to the annual rental of \$5.00 payable in advance, as herein provided, royalty at the rate of five cents per ton of 2,000 lbs. shall be paid by the lessee on the merchantable output mined under these Regulations.

9. All payments of rentals required to be made under these Regulations, subsequent to the rental required to be forwarded with the application, shall be due and payable on the first day of January of each year, and all royalties required to be paid under these Regulations shall be due and payable on the first day of January, the first day of April, the first day of July and the first day of October in each year respectively.

10. There shall be payable an annual rental of \$5.00 in advance for each and every year, and if during the term of the lease, the lessee shall fail to pay the annual rental of \$5.00 before the first day of February in each year, the lease shall be subject to cancellation, and to the forfeiture of all rights granted thereunder.

11. The lessee shall furnish the Minister of Public Works with sworn returns at such times as may be directed, accounting for the full quantity of merchantable coal mined under these Regulations. If default is made in payment of the royalty or in furnishing the returns for thirty days after they have become due, the lease shall be subject to cancellation and to the forfeiture of all rights granted thereunder.

12. Every lessee of coal mining rights which are not being operated shall furnish the Minister of Public Works with a sworn statement to that effect on the first day of January in each year.

13. Any attempt to defraud by withholding any part of the royalty, herein provided for, or by making false statements as to the amount of coal mined, may be followed by cancellation of the lease in respect of which fraud or false statement has been committed or made. Any authorized officer of the Government or other person appointed by the Minister of Public Works shall have the right to enter upon any land leased together with the mines or workings thereon, to examine all places, records or books of the lessee, and to make such other examination as may be deemed necessary in order to ascertain whether or not the terms of the lease are being complied with.

14. Where a lease has been granted to any person for mining coal such coal shall be mined in the manner, under the conditions and to the extent prescribed therein, otherwise, the lease shall be subject to cancellation.

15. Any lease granted under these Regulations may be cancelled for cause at any time and on the cancellation of such lease, operations within the area defined by the lease shall immediately cease.

16. No single lease shall be issued for a greater extent of road allowance than that adjacent to one side of one section, but for the purpose of these Regulations the block of land at the intersection of two road allowances may be considered as adjacent to either one of the four sections contiguous thereto.

17. All payments required to be made under these Regulations shall be made by accepted bank cheque, bank draft, money order or cash.

18. If by reason of the operation of the lease under these Regulations, any road allowance is damaged in any way, the lessee shall be held responsible for such damage, and for any other loss or damage arising therefrom, and may be required to remedy same, and should he fail to do so within the time specified by the Minister of Public Works, the Minister may have such repairs made as he may deem necessary and the cost of such repairs shall be paid by the lessee.

19. Any person holding a mine surveyor's certificate who surveys the workings of a mine, or any person holding a mine surveyor's certificate under whose supervision the workings of a mine are surveyed in accordance with the provisions of *The Mines Act*, shall forward to the Minister of Public Works within thirty days after the date of such survey, a correct plan of the workings of the mine as they were at the time the survey was made, accompanied by a statement of the amount of merchantable coal he estimates has been removed under these Regulations since the last preceding survey was made in accordance with the provisions of *The Mines Act*, and such statement shall be sworn to before a commissioner and shall be on a form supplied by the Minister of Public Works.

20. A royalty of five cents per ton of 2,000 lbs. shall be paid before the thirty-first day of December, 1916, on all coal mined under road allowances subsequent to the first day of September, 1905, and previous to the date of the coming into force of these Regulations.

21. The lessee shall keep true and correct books of such kind and in such form as may be prescribed or approved of from time to time by the Minister of Public Works, showing the quantity of coal taken out in accordance with these Regulations.

22. The holder of any lease under these Regulations shall not assign, transfer or sublet the rights covered by such lease or any part thereof.

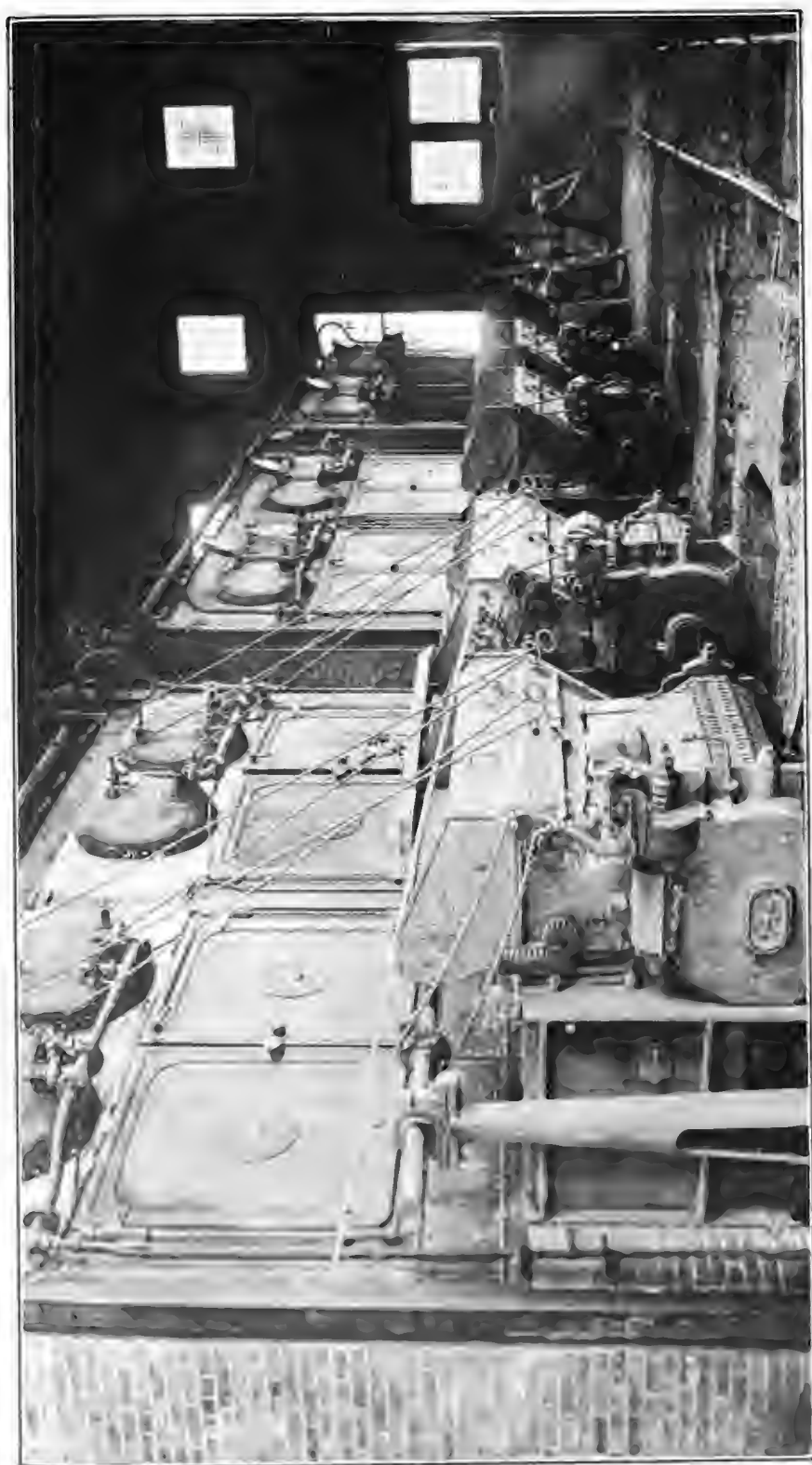
The following tables, which show the quantities in tons and values of coals entered for consumption each month during the year 1916 through ports in the Provinces of Manitoba, Saskatchewan and Alberta, and including the ports of Fort Frances, Fort William and Port Arthur, have been compiled from information received from the Commissioner of Customs at Ottawa.

BITUMINOUS SLACK.

	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total	Value.
Fort Frances	1,984	1,854	2,596	1,081	1,169	955	1,138	1,583	1,630	1,920	1,847	2,039	19,796	\$ 50,804.00
Fort William	3,577	16,678	15,506	4,899	1,790	5,599	28,772	23,259	18,140	7,248	28,446	16,972	170,886	134,613.00
Port Arthur	2,089	83	.....	633	338	489	886	580	422	3,379	685	.....	9,584	7,878.00
Brandon	2,020	2,771	1,394	419	502	142	78	30	138	840	1,669	1,215	11,218	27,017.00
Emerson	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Gretna	40	.....	.....	.....	87	.....	.....	.....	65	81	2	.....	278	835.00
Portage la Prairie	108	557	294	177	207	312	361	399	402	191	241	502	3,751	8,212.00
Winnipeg	6,773	5,983	4,709	1,972	2,700	1,636	1,446	2,784	2,094	4,822	3,249	4,565	42,733	95,442.00
Moose Jaw	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
North Portal	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Prince Albert	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Regina	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Saskatoon	152	120	83	38	23	30	.....	.....	.....	.....	.....	.....	446	1,048.00
Calgary	.....	.....	.....	.....	.....	20	26	.....	.....	.....	.....	.....	46	139.00
Edmonton	.....	.....	.....	.....	.....	55	22	.....	.....	.....	.....	.....	77	274.00
Lethbridge	.....	.....	.....	.....	.....	.....	21	.....	.....	.....	.....	.....	21	64.00
Total	16,743	28,046	24,582	9,219	6,816	9,238	32,750	28,635	22,891	18,484	36,139	25,293	258,836	\$326,326.00



INTERIOR OF LAMP STATION, NO. 6 MINE, CANADIAN PACIFIC RAILWAY, DEPARTMENT OF NATURAL RESOURCES, LETHBRIDGE.



BOILER ROOM, NORTH AMERICAN COLLIERIES, LIMITED, COALBROOK MINE.



NO. 6 MINE, CANADIAN PACIFIC RAILWAY COMPANY, DEPARTMENT OF NATURAL RESOURCES, LETHBRIDGE.



MOUNTAIN PAGE COAL COMPANY, LIMITED.

BITUMINOUS LUMP.

	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total	Value.
Fort Frances	1,433	5,132	3,580	3,935	1,756	5,224	5,145	2,236	7,176	3,925	3,618	2,494	45,554	\$ 59,658.00
Fort William	117,024	153,700	54,748	16,014	53,918	102,428	107,137	127,204	90,997	123,802	97,504	59,658	1,104,134	1,400,480.00
Port Arthur	105,519	35,452	31,117	32,518	44,007	120,306	136,692	93,653	108,667	59,761	52,635	75,226	895,553	1,155,259.00
Brandon	687	1,168	1,444	483	195	154	172	290	728	510	399	426	6,686	21,491.00
Emerson										67			67	146.00
Gretna	180	494	458	135	199	42		173	394	296	310	350	3,031	11,924.00
Portage la Prairie	168	575	366	22	111	71	28	214	271	183	308	324	2,641	10,095.00
Winnipeg	5,802	12,590	19,098	554	3,667	2,194	772	2,181	4,939	3,560	3,049	1,545	59,951	99,775.00
Moose Jaw	21	11		12		30			24	2	15	3	118	592.00
North Portal		7									10	2	19	175.00
Prince Albert		30											30	87.00
Regina				1		16			2		30	58	107	575.00
Saskatoon														
Calgary									22				22	73.00
Edmonton				30									30	148.00
Lethbridge	7	41		3	2					2			55	295.00
Total	230,841	209,200	110,811	53,707	103,855	230,465	249,946	225,951	213,220	192,138	157,878	140,086	2,118,098	\$2,559,873.00

ANTHRACITE.

	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total	Value.
Fort Frances					20,053	68,856	64,173	67,095	48,225	42,071	37,248	30,468	378,189	\$2,104,797.00
Fort William						12,535	58,904	13,710	28,086	6,472	1,947		121,654	680,665.00
Port Arthur													5,229	36,071.00
Brandon	625	1,607	848	61				91	656	110	406			
Emerson														
Gretna	80	331	72					239	175	296	179	240	1,612	11,462.00
Portage la Prairie	181	366	411	55		32	64	41	155	143	116	70	1,634	11,436.00
Winnipeg	3,189	14,358	1,632	327	253	1,734	140		1,339	1,424	514	379	25,289	163,801.00
Moose Jaw														
North Portal														
Prince Albert														
Regina		3	32										35	257.00
Saskatoon														
Calgary														
Edmonton														
Lehrbridge														
Total	4,075	16,665	2,995	443	20,306	83,157	123,281	81,176	78,636	50,816	40,410	31,682	533,642	\$3,008,489.00

From the above tables it will be noted that 2,910,576 tons valued at \$6,094,688 were imported into the territory lying between Port Arthur and the western boundary of Alberta. In order to ascertain the value of this coal at the points of entry into Canada, approximately Two Dollars per ton should be added for transportation and other charges, making the total value of the imported coal at these points during the year 1916 approximately \$11,915,840.

SUMMARY OF STATISTICS.

Number of coal mines in operation during 1916	279
Number of copper ore mines in operation during 1916	2
Number of shale mines in operation during 1916	1
Number of mines opened during 1916	44
Number of mines reopened during 1916	6
Number of mines abandoned during 1916	54
Number of short tons of coal produced during 1916	4,648,604
Number of short tons of briquettes produced during 1916	197,959
Number of short tons of coke produced during 1916	41,950
Average number of persons employed above ground during 1916	2,034
Average number of persons employed underground during 1916	5,536
Number of separate accidents causing loss of life during 1916	20
Number of deaths caused by accidents above ground during 1916	1
Number of deaths caused by accidents underground during 1916	19
Number of serious accidents above ground during 1916	14
Number of serious accidents below ground during 1916	37
Number of slight accidents above ground during 1916	5
Number of slight accidents below ground during 1916	29
Number of persons prosecuted under The Mines Act during 1916	38
Number of provisional overmen's certificates issued during 1916	152
Number of examiner's certificates issued	436
Number of overmen's certificates issued	211
Number of manager's certificates issued	167
Number of mine surveyor's certificates issued	126
Number of mine rescue certificates issued	261

In the following tables the short ton of 2,000 lbs. is used in all cases.

Year	Output in tons for N.W.T. (Alberta and Saskatchewan)	Output in tons Alberta
1901	316,649	
1902	510,674	
1903	622,939	
1904	782,931	
1905		811,228
1906		1,385,000
1907		1,834,745
1908		1,845,000
1909		2,174,329
1910		3,036,757
1911		1,694,564
1912		3,446,349
1913		4,306,346
1914		3,821,739
1915		3,434,891
1916		4,648,604

CLASSIFICATION OF OUTPUTS DURING THE YEARS 1901 TO 1916
INCLUSIVE.

Year	Lignite	Lignite and Bitu- minous	Bitu- minous	Anthra- cite	Coal used in Coke Produc- tion	Briqu- ettes	Coke
*1901	.....	331,907	.....	14,742	.....	.....	.....
*1902	.....	494,087	.....	16,587	.....	.....	.....
*1903	.....	617,754	.....	5,185	.....	.....	.....
*1904	.....	759,568	.....	23,363	.....	.....	.....
*1905	.....	972,686	.....	43,653	71,292	.....	46,640
1906	602,780	.....	546,623	235,597	103,936	.....	69,844
1907	639,335	.....	939,295	256,115	112,887	49,585	73,782
1908	584,334	.....	1,011,571	249,095	128,397	36,261	75,657
**1909	763,673	.....	1,197,399	213,257	148,104	89,785	87,812
1910	878,011	.....	1,896,961	261,785	196,249	108,996	121,578
***1911	964,700	.....	649,745	80,119	61,591	48,200	35,984
1912	1,341,389	.....	1,926,371	178,589	170,818	90,000	105,684
1913	1,763,225	.....	2,374,401	168,720	104,012	130,861	65,167
1914	1,697,401	.....	1,953,367	170,971	44,249	109,082	29,058
1915	1,682,922	.....	1,626,237	125,732	38,878	83,180	23,826
1916	2,172,801	.....	2,335,259	140,544	67,105	107,959	41,950

*Includes outputs from Alberta and Saskatchewan.

**During the year 1909 a strike affecting all the larger mines in the Province lasted for a period of three months.

***During the year 1911 a strike affecting all the larger mines in the Province lasted for a period of eight months.

The following table shows the outputs of the different districts for the years 1915 and 1916:

District	1915			1916		
	Lignite	Bitu- minous	Anth- racite	Lignite	Bitu- minous	Anth- racite
Crow's Nest Pass...		916,051			1,402,636	
Pincher Creek		3,332		3,867		
Lethbridge	613,293			740,022		
Magrath	1,423			1,247		
Milk River	4,016			5,577		
Taber	89,698			139,318		
Bow Island	5,762			4,132		
Medicine Hat	5,536			12,173		
Aldersyde		7,946		7,087		
High River		3,810		1,526		
Canmore		208,875			281,387	
Banff			125,732			140,544
Drumheller	247,805			377,618		
Big Valley	15,756			16,478		
Brazeau		232,728			289,768	
Brooks	12,147			10,917		
Hanna	28,556			25,048		
Lacombe	27,498			18,803		
Trochu	10,886			12,898		
Three Hills	15,306			15,120		
Carbon	6,852			5,091		
Battle River	9,406			10,352		
Camrose	56,731			52,588		
Tofield	54,320			67,063		
Clover Bar	155,613			204,546		
Edmonton	100,981			111,907		
Namoo	8,423			12,379		
Cardiff	177,617			236,433		
Wabamun	2,409			7,475		
Pembina	32,888			72,746		
Jasper Park		86,496			152,504	
Yellowhead Pass		83,414			69,426	
Mountain Park		83,585			139,538	
Peace River				390		
Total	1,682,922	1,626,237	125,732	2,172,801	2,335,259	140,544

The following table indicates how the total outputs of COAL, BRIQUETTES and COKE were disposed of:

	SOLD FOR CONSUMPTION IN						USED			Lifted from Stock	Slack put on Waste Heap	Total Output for Year (including slack)	
	Alberta	British Columbia	Saskatchewan	Manitoba	United States		Total Sales	Making Briquettes	Making Coke				Under Coll. Boilers
Lignite	959,526	21,143	853,046	79,252	2,324	1,915,291			152,455		105,035	2,172,801	
Bituminous	1,883,549	57,894	140,413	17,719	58,187	2,157,762		67,105	103,192	1,179	8,379	2,335,259	
Anthracite	23,595	7,376	14,306	294	581	46,152	57,765		26,038		10,589	140,544	
Total	2,866,670	86,413	1,007,765	97,265	61,092	4,119,205	57,765	67,105	281,705	1,179	124,003	4,648,604	
Briquettes	89,535	3,169	13,891	1,364		107,959						107,959	
Coke	52	41,888				41,940			10			41,950	

The bituminous coal shown in these tables as being sold for consumption in Alberta includes coal sold to railway companies for the use of locomotives, a considerable percentage of which was probably used in other Provinces.

The following table indicates how the total output of LIGNITE coal from the Province was disposed of—

Name of District	SOLD FOR CONSUMPTION IN					Total Sales	Used Under Coll. Boilers	Slack put on Waste Heap	Total Output for Year (including Slack)
	Alberta	British Columbia	Saskatchewan	Main body	United States				
Pincher Creek	3,603					2,603			3,867
Lethbridge	219,311	16,191	362,396	56,798	1,978	656,674	74,851	264	740,022
Magrath	1,242					1,242		5	1,247
Milk River	4,806					4,806		771	5,577
Taber	18,266	2,783	81,784	7,713	346	110,892	18,890	9,536	139,318
Bow Island	3,661					3,661		471	4,132
Medicine Hat	4,706					11,727	34	412	12,173
Aldersyde	6,652					6,652		435	7,087
High River	1,525					1,525		1	1,526
Drumheller	104,481	648	226,135	7,984		339,248	15,669	22,701	377,618
Big Valley	12,983		1,950			14,933	255	1,290	16,478
Brooks	10,888					10,888		29	10,917
Hanna	24,135					24,135	141	772	25,048
Laconbe	18,349		80			18,349		454	18,803
Trochu	11,479					11,479	50	1,369	12,898
Three Hills	11,561		1,029			12,590	1,138	1,092	15,120
Carbon	4,902					4,902	112	77	5,091
Battle River	9,851					9,851		501	10,352
Camrose	26,315		21,777			48,092	925	3,571	52,588
Tofield	47,193		12,937	601		60,731	2,749	3,583	67,063
Clover Bar	157,320		26,230	1,310		184,860	10,038	9,648	204,546
Edmonton	72,215		22,320	344		94,879	8,518	8,510	111,907
Namoo	8,543		1,943	30		10,516	331	1,532	12,379
Cardiff	126,004	1,169	66,905	3,531		197,609	11,784	27,040	236,433
Wabamun	3,580		2,285	60		5,925		1,550	7,475
Pembina	45,659	352	18,574	561		65,137	6,690	919	72,746
Peace River	385					385		5	390
Total	959,526	211,143	853,046	79,252	2,324	1,915,291	152,475	105,035	2,172,801

The following table indicates how the total output of BITUMINOUS coal from the Province was disposed of:—

Name of District	SOLD FOR CONSUMPTION IN						USED			Slack put on Waste Heap	Total Out put for year (including slack)
	Alberta	British Columbia	Saskatchewan	Manitoba	United States	Total Sales	Making Coke	Under Coll. Boilers	Put to Stock		
Crow's Nest Pass	1,050,054	36,901	123,852	6,022	57,981	1,274,810	67,105	62,020	1,299	7,628	1,402,636
Canmore	213,545	14,618	13,411	11,697	206	253,477		20,282			281,387
Brazeau	280,261		2,646			282,907		6,861			289,768
Jasper Park	148,082	35	56			148,173		4,331			152,504
Yellowhead Pass	56,047	6,304	403			62,754		5,801	120	751	69,426
Mountain Park	135,560	36	45			135,641		3,897			139,538
Total	1,883,549	57,894	140,413	17,719	58,187	2,157,762	67,105	103,192	1,299	8,379	2,335,259

The following table indicates how the outputs of ANTHRACITE, BRIQUETTES and COKE were disposed of:—

	SOLD FOR CONSUMPTION IN					Total Sales	USED			Total Output for Year including Slack
	Alberta	British Columbia	Saskatchewan	Manitoba	United States		Making Briquettes	Under Coll. Boilers	Slack Put on Stock	
Anthracite	23,595	7,376	14,306	294	581	46,152	57,765	26,038	10,589	140,544
Briquettes	89,535	3,169	13,891	1,364		107,959				107,959
Coke	52	41,888				41,940		10		41,950

The Crow's Nest Pass was the only district in which Coke was produced during the year, and Banff in which Briquettes were produced.

The following table shows the amount of LIGNITE Coal sold during each month for consumption in Alberta:

District.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total Sales.
Pincher Creek ..	652	1,158	241	123	71	13,441	14,256	77	154	173	393	561	3,603
Lethbridge	27,392	25,685	13,022	9,192	11,862	36	56	18,748	17,771	22,292	23,842	21,808	219,311
Magrath	136	165	36	39	50	189	196	98	132	142	189	121	1,242
Milk River	591	531	399	233	191	215	311	576	263	457	750	908	4,806
Taber	3,982	2,885	498	256	215	282	311	576	1,550	2,233	2,952	2,556	18,266
Bow Island	416	369	303	152	127	89	104	198	217	392	613	651	3,661
Medicine Hat	570	716	727	339	11	10	11	11	195	392	699	1,025	4,706
Aldersyde	723	713	561	183	301	272	304	375	437	527	972	1,284	6,652
High River	85	146	360	103	40	48	55	54	87	161	179	207	1,325
Drumheller	9,162	11,014	3,843	3,187	3,726	3,744	4,190	7,962	9,946	14,134	16,822	16,751	104,481
Big Valley	541	1,435	1,150	170	18	17	12	347	596	1,434	1,674	5,589	12,983
Brooks	828	948	666	517	578	564	486	685	935	918	1,918	1,845	10,888
Hanna	4,388	2,612	2,029	808	957	808	888	1,214	1,548	2,146	3,320	3,417	24,135
Lacombe	4,945	3,440	1,995	402	275	331	264	225	333	1,363	2,323	3,273	18,269
Trochu	1,494	1,793	873	400	323	490	357	285	965	1,349	1,545	1,505	11,479
Three Hills	1,595	1,428	881	178	328	243	398	588	652	1,235	1,926	2,109	11,561
Carbon	705	596	335	326	339	188	137	311	289	439	559	678	4,902
Battle River	2,202	1,834	666	103	170	116	2	31	311	357	1,501	2,558	9,851
Camrose	3,435	3,359	1,297	829	1,220	741	540	1,688	1,765	2,933	5,053	3,545	26,315
Tofield	7,354	6,892	1,792	1,427	2,911	1,485	1,066	1,708	4,238	3,344	8,772	7,104	47,193
Clover Bar	24,727	20,874	14,001	6,699	5,889	4,279	4,719	8,172	11,194	14,424	20,241	22,098	157,320
Edmonton	12,910	11,726	4,613	2,806	2,378	1,472	1,368	3,403	5,238	6,532	10,446	10,223	72,215
Namoo	1,897	1,505	621	233	196	.....	.....	.....	257	629	1,277	1,937	8,543
Cardiff	20,357	18,586	7,136	4,220	2,041	2,617	3,693	6,422	11,661	13,505	16,471	19,295	126,004
Wabamun .....	.....	.....	.....	.....	.....	.....	.....	.....	50	1,230	1,509	800	3,580
Pembina	5,621	5,508	2,263	1,387	1,314	2,683	2,800	4,898	4,112	3,836	4,616	6,592	45,650
Peace River	123	73	40	9	.....	.....	.....	.....	2	5	64	69	385
Total	135,031	125,991	60,318	34,321	34,831	34,115	36,213	58,156	74,898	96,593	130,750	138,509	959,526

DEPARTMENT OF PUBLIC WORKS

The following table shows the amount of LIGNITE coal sold during each month for consumption in British Columbia:—

District.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total Sales.
Pincher Creek	1,852	1,640	1,080	356	4,148	541	237	728	1,732	1,514	1,105	1,248	16,191
Lethbridge													
Magrath													
Milk River	394	344	34		36	105	175	108	502	284	531	270	2,783
Taber													
Bow Island													
Medicine Hat													
Aldersyde													
High River							64	114	206	148	29		648
Drumheller	33		54										
Big Valley													
Brooks													
Hanna													
Lacombe													
Trochu													
Three Hills													
Carbon													
Battle River													
Camrose													
Tofield													
Clover Bar													
Edmonton													
Namoo	123	128							115	184	483	136	1,169
Cardiff													
Wabamun									32	223	97		352
Pembina													
Peace River													
Total	2,402	2,112	1,178	356	4,184	646	476	950	2,587	2,353	2,245	1,654	21,143

The following table shows the amount of LIGNITE coal sold during each month for consumption in Saskatchewan:—

District	Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Total Sales
Pincher Creek	39,439	43,872	28,847	14,794	16,644	27,342	30,015	27,249	32,786	38,555	32,378	30,475	362,396
Lehrbridge													
Magrath													
Milk River	15,182	15,675	1,171	883	654	686	1,053	5,759	10,165	11,010	10,492	8,474	81,784
Taber													
Bow Island	980	1,250	150	194	46	30	20	43	283	1,050	1,240	1,431	6,701
Melville Hat													
Aldersyde													
High River													
Drumheller	20,157	25,949	9,744	4,211	4,792	5,437	10,883	18,636	22,314	33,246	35,268	35,498	226,135
Big Valley	300	210								360	480	600	1,950
Brooks													
Hanna													
Lacombe			80										80
Trochu													
Three Hills	160	520		60						150	116	23	1,029
Carbon													
Battle River													
Camrose	2,675	2,936	1,236	489	851	897	878	685	1,761	2,226	2,925	4,218	21,777
Tofield	2,576	2,804	262		119	56			339	1,620	1,943	3,218	12,937
Clower Bar	1,100	3,471	820	350	392	411	201	1,002	1,928	4,675	5,729	6,151	26,230
Edmonton	4,185	3,205	437	436	315	231	370	1,411	2,951	2,574	3,122	3,083	22,320
Namoo		194							30	250	509	960	1,943
Cardiff	10,178	10,173	6,202	1,267	463	96	845	1,622	5,193	8,669	11,023	11,174	66,905
Wabamun													
Pembina	2,706	1,150	1,080	950	870	802		790	2,329	2,217	2,281	1,595	2,985
Peace River													
Total	99,638	111,409	50,629	23,624	25,120	35,988	44,937	57,197	80,079	106,602	108,196	109,627	853,046

DEPARTMENT OF PUBLIC WORKS

The following table shows the amount of LIGNITE coal sold during each month for consumption in Manitoba:—

District.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total Sales.
Pincher Creek													
Lethbridge	5,705	6,294	4,583	2,020	2,628	5,596	5,772	4,552	5,097	4,978	4,903	4,670	56,798
Magrath													
Milk River	1,225	1,050	140	35		245	107	460	1,150	1,374	980	947	7,713
Taber													
Bow Island													
Medicine Hat	70	60	60	30					20	30	20	30	320
Aldersyde													
High River													
Drumheller	421	776	564	190	80	75	450	794	678	967	1,680	1,309	7,984
Big Valley													
Brooks													
Hanna													
Lacombe													
Trochu													
Three Hills													
Carbon													
Battle River													
Camrose													
Tofield	24	32						26				66	601
Clover Bar		26						28	60	64	635	497	1,310
Edmonton	213	98										33	344
Namoo													
Cardiff	323	212	66				190		230	262	813	1,435	3,531
Wabamun													
Pembina													
Peace River													
Total	7,981	8,548	5,413	2,275	2,708	5,916	6,519	5,860	7,235	7,738	9,375	9,684	79,252

The following table shows the amount of LIGNITE coal sold during each month for consumption in the United States:—

District.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total Sales.
Pincher Creek													
Lethbridge	54	199	261	43	134	150	306	294	354		99	84	1,978
Magrath													
Milk River													
Taber	167	68						31	80				346
Bow Island													
Medicine Hat													
Aldersyde													
High River													
Drumheller													
Big Valley													
Brooks													
Hanna													
Lacombe													
Trochu													
Three Hills													
Carbon													
Battle River													
Camrose													
Tofteld													
Clover Bar													
Edmonton													
Namoo													
Cardiff													
Wabamun													
Pembina													
Peace River													
Total	221	267	261	43	134	150	306	325	434		99	84	2,324

The following table shows the amount of BITUMINOUS coal sold during each month for consumption in Alberta :—

District.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total Sales.
Crow's Nest Pass	46,212	48,038	77,658	64,074	102,686	116,571	118,294	125,420	90,286	102,512	87,136	71,167	1,050,054
Canmore	14,578	17,861	22,067	14,951	15,957	15,890	20,685	21,458	17,283	18,270	16,994	18,651	212,545
Brazeau	19,197	21,907	23,438	29,854	27,473	24,361	26,024	20,779	24,127	21,370	22,480	19,251	280,261
Jasper Park	3,951	9,864	10,933	9,834	11,869	13,516	14,965	10,274	12,841	13,249	16,884	17,892	148,082
Yellowhead Pass	7,223	10,047	10,553	3,094	3,390	1,493	1,050	1,225	2,949	3,242	5,394	6,387	56,047
Mountain Park	7,348	11,847	14,158	12,626	12,837	9,650	11,925	11,523	9,837	12,181	11,796	9,832	135,560
Total	100,519	119,564	158,807	134,433	173,312	181,281	192,943	190,679	157,323	170,824	160,684	143,180	1,883,549

The following table shows the amount of BITUMINOUS coal sold during each month for consumption in British Columbia :—

District.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total Sales.
Crow's Nest Pass	1,654	1,811	1,258	994	671	1,485	1,824	3,057	2,650	3,538	8,027	9,932	36,901
Canmore	2,319	1,709	1,782	872	1,376	578	728	969	1,382	1,244	1,040	619	14,618
Brazeau .....	.....	.....	.....	.....	.....	.....	35	.....	.....	.....	.....	.....	35
Jasper Park	886	1,022	.....	.....	55	.....	101	218	283	344	1,189	2,206	6,304
Yellowhead Pass	36	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	36
Mountain Park .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total	4,895	4,542	3,040	1,866	2,102	2,063	2,688	4,244	4,315	5,126	10,256	12,757	57,894

The following table shows the amount of BITUMINOUS coal sold during each month for consumption in Saskatchewan:

District.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total Sales.
Crow's Nest Pass	8,747	11,277	5,922	6,288	8,263	6,212	5,191	11,526	17,865	14,394	14,238	13,929	123,852
Canmore	1,422	1,486	532	608	861	550	489	1,682	2,509	1,228	1,130	914	13,411
Brazeau	74	30	120	35	125	64			348	923	339	588	2,646
Jasper Park													56
Yellowhead Pass											179	224	403
Mountain Park			25		20								45
Total	10,299	12,793	6,599	6,931	9,269	6,826	5,680	13,208	20,722	16,545	15,886	15,655	140,413

The following table shows the amount of BITUMINOUS coal sold during each month for consumption in Manitoba:

District.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total Sales.
Crow's Nest Pass	443	234	145	196	170	205	178	428	762	740	1,260	1,261	6,022
Canmore				655	2,949	3,645	2,162		162	607	852	665	11,697
Brazeau													
Jasper Park													
Yellowhead Pass													
Mountain Park													
Total	443	234	145	851	3,119	3,850	2,340	428	924	1,347	2,112	1,926	17,719

The following table shows the amount of BITUMINOUS coal sold during each month for consumption in the United States:—

District.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total Sales.
Grow's Nest Pass	3,609	4,537	2,317	1,974	1,344	720	1,233	3,037	5,116	4,790	12,160	17,144	57,981
Canmore									164	42			206
Brazeau													
Jasper Park													
Yellowhead Pass													
Mountain Park													
Total	3,609	4,537	2,317	1,974	1,344	720	1,233	3,037	5,280	4,832	12,160	17,144	58,187

The following table shows the amount of Anthracite Coal, Briquettes and Coke respectively, sold during each month for consumption in Alberta:—

	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total Sales.
Anthracite	1,889	2,037	2,133	2,072	2,486	1,856	1,667	2,271	1,988	1,624	1,809	1,763	23,595
Briquettes	5,560	7,368	9,938	9,006	9,137	9,547	7,944	8,328	6,667	5,587	5,162	5,291	89,535
Coke				26	26								52

The following table shows the amount of Anthracite Coal, Briquettes and Coke respectively, sold during each month for consumption in British Columbia:—

	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total Sales.
Anthracite	534	596	781	676	660	855	565	556	663	519	501	470	7,376
Briquettes	277	346	211	54	102	64	128	182	180	362	595	668	3,169
Coke	2,246	2,237	4,005	4,375	5,372	4,938	2,232	2,847	3,359	3,498	3,234	3,545	41,888

OUTPUTS AND NUMBER OF MINES PRODUCING.

	Under 10,000 Tons.		From 10,000 to 50,000 Tons.		From 50,000 to 100,000 Tons.		From 100,000 to 200,000 Tons.		From 200,000 to 300,000 Tons.		From 300,000 to 400,000 Tons.		Total.	
	No.	Output.	No.	Output.	No.	Output.	No.	Output.	No.	Output.	No.	Output.		
Lignite	226	258,521	22	559,855	7	462,658	3	353,346	1	222,509	1	315,912	260	2,172,801
Bituminous	5	7,082	1	43,186	2	124,450	4	620,894	5	1,195,610	1	344,037	18	2,335,259
Anthracite							1	140,544					1	140,544
Total	231	265,603	23	603,041	9	587,108	8	1,114,784	6	1,418,119	2	659,949	279	4,648,604

In addition to the mines shown in above table as being in operation, two copper mines and one shale mine were operated during the year 1916.

The following table shows the classification of persons employed in the LIGNITE, BITUMINOUS and ANTHRACITE Coal Fields.

Coal Fields.													
UNDERGROUND.						ABOVE GROUND.							
	Supervision	Miners and Helpers	Haulage Employees	Mechanics and Skilled Labor	Others	Total	Supervision	Mechanics and Skilled Labor	Clerical Assistance	Others	Coke Ovens	Brigette Plant	Total
Lignite	183	2,157	451	142	204	3,137	82	245	77	591			995
Bituminous	109	1,228	425	105	391	2,258	43	194	57	564	26		884
Anthracite	7	92	8	1	33	141	5	44	8	87		11	155
Total	299	3,477	884	248	628	5,536	130	483	142	1,242	26	11	2,034
													4,132
													3,142
													296
													7,570

The following table shows the average number of persons employed during each month in the LIGNITE Coal Field, above and below ground:

District.	Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
Pincher Creek	13	11	6	6	3	1,270	1,287	7	15	14	24	28
Lethbridge	1,668	1,677	1,420	1,162	1,217	3	1,287	1,213	1,223	1,284	1,362	1,393
Magrath	7	8	8	4	4	3	3	3	2	3	9	9
Milk River	22	19	19	18	10	12	13	12	12	21	23	35
Taber	319	479	194	115	145	161	166	229	318	357	374	408
Bow Island	23	22	20	17	12	15	14	11	16	18	21	25
Medicine Hat	71	47	31	25	22	13	17	17	33	46	74	90
Aldersyde	26	25	23	16	13	13	14	15	19	20	28	32
High River	5	8	8	2	2	2	2	3	2	3	3	6
Drumheller	1,044	952	622	430	342	376	441	618	798	877	1,010	1,143
Big Valley	17	43	43	23	1	1	1	15	31	35	48	50
Brooks	27	28	25	19	19	18	19	19	24	28	31	31
Hanna	58	58	52	30	25	26	25	22	29	38	51	57
Lacombe	88	93	70	18	14	12	10	11	15	40	63	77
Trochu	48	48	34	26	17	19	20	19	22	36	36	35
Three Hills	54	54	53	19	14	11	14	16	20	30	38	43
Carbon	21	20	16	12	12	9	10	11	10	11	14	14
Battle River	45	33	19	2	4	2	2	4	4	12	35	44
Camrose	99	91	66	44	42	41	43	46	76	96	124	132
Tofield	130	131	39	38	42	61	63	63	76	77	127	140
Clover Bar	380	378	241	187	158	148	169	234	256	304	365	464
Edmonton	372	332	180	115	99	86	74	107	172	181	219	223
Namoo	38	35	22	7	7	72	78	103	16	29	43	59
Cardiff	301	296	175	148	95	59	69	88	196	238	321	343
Wabamun	66	65	68	63	61	59	11	11	16	34	49	47
Pembina	19	9	6	3	3	3	3	3	99	116	130	126
Peace River	19	9	6	3	3	3	3	3	2	3	4	4
Total	5,152	4,965	3,460	2,549	2,380	2,430	2,556	2,887	3,502	3,951	4,624	5,060

The following table shows the average number of persons employed during each month in the LIGNITE, BITUMINOUS and ANTHRACITE Coal Fields, above and below ground:

	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Lignite	5,152	4,965	3,460	2,549	2,380	2,430	2,556	2,897	3,502	3,951	4,624	5,060
Bituminous	3,280	3,183	3,079	2,919	3,006	2,981	3,122	2,941	3,127	3,078	3,186	3,234
Anthracite	301	298	302	291	291	292	289	291	298	290	305	305
Total	8,733	8,446	6,841	5,759	5,677	5,703	5,967	6,129	6,927	7,319	8,115	8,599

The following table shows the average number of persons employed during each month in the BITUMINOUS Coal Field, above and below ground:

District.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Crow's Nest Pass ..	1,703	1,652	1,551	1,552	1,657	1,688	1,791	1,736	1,879	1,833	1,851	1,835
Canmore	356	386	409	366	358	392	403	375	393	333	339	332
Brazzau	584	518	449	428	394	350	374	360	344	353	364	383
Jasper Park	180	193	253	236	262	276	282	243	261	272	288	306
Yellowhead Pass ..	225	221	189	105	93	65	45	42	83	106	157	196
Mountain Park	232	213	228	232	242	210	227	185	167	181	187	182
Total	3,280	3,183	3,079	2,919	3,006	2,981	3,122	2,941	3,127	3,078	3,186	3,234

The following table shows the average number of persons employed during each month in the ANTHRACITE Coal Field, above and below ground:

District.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Banff	301	298	302	291	291	292	289	291	298	290	305	305

PER CAPITA PRODUCTION OF MINES IN THE PROVINCE.

Year	Gross tons of coal mined	Total No. of men employed	Tons of coal mined per man	No. of men employed undergrnd	Tons of coal mined per man empl'd undergrnd
1906	1,385,000	2,800	494	2,000	692
1907	1,834,745	3,600	509	2,700	679
1908	1,845,000	3,780	488	2,681	688
* 1909	2,174,329	5,207	417	3,893	566
** 1910	3,036,757	5,818	504	4,090	742
** 1911	1,694,564	6,689	253	4,517	375
1912	3,446,349	6,661	517	4,861	708
1913	4,306,346	8,068	533	5,837	737
1914	3,821,739	8,170	467	6,052	631
1915	3,434,891	6,445	532	4,493	764
1916	4,648,604	7,579	614	5,536	839

*During the year 1909 a strike affecting all the larger mines in the Province lasted for a period of three months.

**During the year 1911 a strike affecting all the larger mines in the Province lasted for a period of eight months.

PER CAPITA PRODUCTION OF MINES IN THE LIGNITE COAL FIELD.

Year	Gross tons of coal mined	No. of men employed undergrnd	Total No. of men employed	Tons of coal mined per man empl'd undergrnd	Tons of coal mined per man employed
1910	878,011	1,676	2,307	524	380
1911	964,700	2,488	3,548	391	271
1912	1,341,389	2,283	2,980	587	450
1913	1,763,225	2,929	4,017	601	438
1914	1,697,401	3,190	4,219	532	402
1915	1,682,922	2,210	3,181	761	529
1916	2,172,801	3,137	4,132	692	525

PER CAPITA PRODUCTION OF MINES IN THE BITUMINOUS COAL FIELD.

Year	Gross tons of coal mined	No. of men employed undergrnd	Total No. of men employed	Tons of coal mined per man empl'd undergrnd	Tons of coal mined per man employed
1910	1,896,961	2,076	2,981	914	636
1911	649,745	1,820	2,641	357	246
1912	1,926,371	2,353	3,243	818	594
1913	2,374,401	2,645	3,562	897	666
1914	1,953,367	2,632	3,529	742	553
1915	1,626,237	2,103	2,921	773	557
1916	2,335,259	2,258	3,142	1,034	743

DEPARTMENT OF PUBLIC WORKS

PER CAPITA PRODUCTION OF MINES IN THE ANTHRACITE COAL FIELD.

Year	Gross tons of coal mined	No. of men employed undergr'nd	Total No. of men employed	Tons of coal mined per man empl'd undergr'nd	Tons of coal mined per man employed
1910	261,785	338	530	774	493
1911	89,119	209	500	383	160
1912	178,589	225	438	793	407
1913	168,720	263	489	641	345
1914	170,971	230	422	743	405
1915	125,732	180	343	698	366
1916	140,544	141	296	996	474

The tables showing the number of men employed in the Bituminous Coal field include employees at the coke ovens, and in the Anthracite field employees at the briquetting plant.

PER CAPITA PRODUCTION OF MINES IN THE LIGNITE COAL FIELD BY DISTRICTS.

District	Gross tons of coal mined	No. of men employed undergr'nd	Total No. of men employed	Tons of coal mined per man empl'd undergr'nd	Tons of coal mined per man employed
Pincher Creek	3,867	11	12	351	322
Lethbridge	740,022	1,004	1,348	737	548
Magrath	1,247	3	5	415	249
Milk River	5,577	14	18	398	309
Taber	139,318	229	288	608	483
Bow Island	4,132	23	28	179	147
Medicine Hat	12,173	26	38	468	320
Aldersyde	7,087	27	27	262	262
High River	1,526	8	11	190	137
Drumheller	377,618	614	843	614	447
Big Valley	16,478	29	37	568	445
Brooks	10,917	20	23	545	474
Hanna	25,048	55	64	455	391
Lacombe	18,803	94	108	200	174
Trochu	12,898	36	40	358	322
Three Hills	15,120	60	77	250	196
Carbon	5,091	20	20	254	254
Battle River	10,352	46	48	225	215
Camrose	52,588	73	93	720	565
Tofteld	67,063	70	85	958	788
Clover Bar	204,546	220	298	929	686
Edmonton	111,907	159	217	703	515
Namoo	12,379	36	42	343	294
Cardiff	236,433	164	212	1,441	1,115
Wabamun	7,475	24	35	311	213
Pembina	72,746	57	100	1,278	727
Peace River	390	15	15	26	26
Total	2,172,801	3,137	4,132	692	525

PER CAPITA PRODUCTION OF MINES IN THE BITUMINOUS COAL FIELD BY DISTRICTS.

District	Gross tons of coal mined	No. of men employed undergr'nd	Total No. of men employed	Tons of coal mined per man empl'd undergr'nd	Tons of coal mined per man employed
Crow's Nest Pass...	1,402,636	1,277	1,719	1,098	815
Canmore	281,387	247	370	1,139	760
Brazeau	289,768	321	406	902	713
Jasper Park	152,504	164	254	929	600
Yellowhead Pass ...	69,426	107	188	648	369
Mountain Park	139,538	142	205	982	680
Total	2,335,259	2,258	3,142	1,034	743

PER CAPITA PRODUCTION OF MINES IN THE ANTHRACITE COAL FIELD.

District	Gross tons of coal mined	No. of men employed undergr'nd	Total No. of men employed	Tons of coal mined per man empl'd undergr'nd	Tons of coal mined per man employed
Banff	140,544	141	296	996	474

The following tables show the amount of mine timber used during the year:

LIGNITE COAL FIELD

Pincher Creek District	7,840 lineal feet		
Lethbridge	3,618,259	"	"
Magrath	1,950	"	"
Milk River	11,014	"	"
Taber	208,584	"	"
Bow Island	9,075	"	"
Medicine Hat	32,620	"	"
Aldersyde	19,997	"	"
High River	6,550	"	"
Drumheller	616,237	"	"
Big Valley	74,200	"	"
Brooks	8,425	"	"
Hanna	35,672	"	"
Lacombe	53,720	"	"
Trochu	24,000	"	"
Three Hills	34,512	"	"
Carbon	10,700	"	"
Battle River	9,785	"	"
Camrose	160,600	"	"
Tofield	6,000	"	"
Clover Bar	489,178	"	"
Edmonton	296,510	"	"
Namoo	69,950	"	"
Cardiff	322,328	"	"
Wabamun	37,938	"	"
Pembina	174,028	"	"
Peace River	250	"	"
Total	6,339,922	"	"

BITUMINOUS COAL FIELD.

Crow's Nest Pass District	1,915,118 lineal feet		
Canmore	267,650	"	"
Brazeau	729,244	"	"
Jasper Park	255,679	"	"
Yellowhead Pass	26,449	"	"
Mountain Park	739,208	"	"
Total	3,933,348	"	"

ANTHRACITE COAL FIELD.

Banff District	637,091 lineal feet		
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The following table shows the number of days in each month on which LIGNITE Coal was drawn:

Name of District	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total No. of days worked
Pincher Creek	14	13	7	7	7	5	4	5	10	12	12	18	114
Lethbridge	23	21	14	11	13	16	15	18	18	19	18	20	206
Magrath	7	10	15	12	12	12	8	7	8	14	17	21	143
Milk River	14	15	14	9	10	12	11	8	15	20	20	24	172
Taber	19	20	10	7	7	7	7	9	11	11	12	14	134
Bow Island	19	18	18	9	8	6	6	7	11	12	16	18	148
Medicine Hat	21	15	14	9	5	3	2	3	13	21	25	22	154
Aldersyde	21	19	19	17	16	17	18	18	15	19	22	23	224
High River	6	8	12	8	6	7	8	7	7	13	13	18	113
Drumheller	18	20	16	24	14	15	17	20	21	24	23	22	234
Big Valley	14	13	17	3	2	2	2	8	16	17	26	24	144
Brooks	18	19	19	13	12	12	11	14	15	17	19	21	190
Hanna	14	13	16	12	13	12	9	11	12	12	19	17	160
Lacombe	22	18	12	3	3	3	2	3	5	8	13	16	108
Trochu	17	16	13	9	10	9	10	9	9	12	12	12	138
Three Hills	16	14	12	8	8	8	9	10	14	17	15	16	147
Carbon	14	11	12	8	11	6	8	11	10	11	13	14	129
Battle River	16	12	5	2	2	2	1	2	2	4	12	14	74
Camrose	20	17	12	10	12	10	11	12	12	16	24	24	180
Tofield	26	21	19	8	11	10	9	18	22	26	26	26	222
Clower Bar	25	23	22	12	12	10	10	16	19	22	22	24	217
Elmington	20	18	15	11	11	10	11	10	14	19	20	22	181
Namoo	24	21	15	5	5	4	5	5	12	19	22	14	151
Cardiff	20	22	17	16	12	11	12	16	22	24	24	24	220
Wabamun							12	12	12	12	21	22	91
Pembina	20	24	24	19	21	26	24	27	24	26	26	25	286
Peace River	10	8	3	2					2	3	3	4	35
Average No. of days worked	16.9	15.9	13.7	9.6	9	8.7	8.9	10.5	13	15.9	18.3	19.2	13.3

The following table shows the number of days in each month on which BITUMINOUS Coal was drawn:

Name of District	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total No. of days worked
Crow's Nest Pass	16	18	21	16	22	21	22	22	21	21	20	23	243
Canmore	23	21	23	17	18	20	22	24	22	25	22	24	261
Brazeau	22	20	22	22	24	20	22	23	24	24	23	21	267
Jasper Park	15	20	20	17	18	15	26	16	25	24	25	25	246
Yellowhead Pass	20	25	22	17	19	19	23	26	20	26	21	27	265
Mountain Park	24	25	27	24	27	21	26	27	26	26	26	24	303
Average No. of days worked.	20.0	21.5	22.5	18.8	21.3	19.3	23.5	23.0	23.0	24.3	22.8	24.0	22.0

The following table shows the number of days in each month on which ANTHRACITE Coal was drawn:

Name of District	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total No. of days worked
Banff	12	13	14	12	13	13	12	13	13	12	11	12	150

EXPLOSIVES.

The following table shows the quantity of Explosives used in pounds for blasting in the LIGNITE Coal Field:

District	NAME OF EXPLOSIVE						Total
	Monobel No. 1	Polar Permite	Black Powder	Dyna mite	Ammonia Powder	Other Expl's.	
Pincher Creek	285	1,000	200				1,485
Lethbridge	17,926		99,594	9,600	365	672	128,157
Magrath			1,025				1,025
Milk River			5,570				5,570
Taber	12		55,130	25			55,167
Bow Island			5,592				5,592
Medicine Hat			12,891				12,891
Aldersyde			3,045	10			3,055
High River	425						425
Drumheller	31,112		110,860	4	570		142,546
Big Valley			475				475
Brooks			5,845				5,845
Hauna	50		5,910				5,960
Lacombe			9,130	20			9,150
Trochu			11,125				11,125
Three Hills	100		6,235				6,335
Carbon			3,925				3,925
Battle River			100	75			175
Camrose				60			60
Tofield			2,400	1,525	350		4,275
Clover Bar	2,400		46,291				48,691
Edmonton	10,799		10,665				21,464
Namoo	16						16
Cardiff	10,693		61,050	700			72,443
Wabamun							
Pembina	10,134						10,134
Peace River							
Total	83,952	1,000	457,058	12,019	1,285	672	555,986

The following table shows the quantity of Explosives used in pounds for blasting in the BITUMINOUS Coal Field:

District	NAME OF EXPLOSIVE						Total
	Monobel No. 1	Polar Permite	Black Powder	Dyna mite	Ammonia Powder	Other Expl's.	
Crow's Nest Pass.	112,837	1,782		336	240		115,195
Canmore	57,040						57,040
Brazeau	1,879	54					1,933
Jasper Park	6,015	2,545		146			8,706
Yellowhead Pass	17,384	4,151					21,535
Mountain Park	22,000						22,000
Total	217,155	8,532		482	240		226,409

The following table shows the quantity of Explosives used in pounds for blasting in the ANTHRACITE Coal Field:

District	NAME OF EXPLOSIVE						Total
	Monobel No. 1	Polar Permite	Black Powder	Dyna mite	Ammonia Powder	Other Expl's.	
Banff	30,800						30,800

DEPARTMENT OF PUBLIC WORKS

The following table shows the number of tons of LIGNITE coal produced per pound of explosive used:

District	No. of Tons mined	No. of Lbs. of Explosive used	Tons of coal mined per lb. of Explosive used
Pincher Creek	3,867	1,485	2.6
Lethbridge	740,022	128,157	5.7
Magrath	1,247	1,025	1.2
Milk River	5,577	5,570	1.0
Taber	139,318	55,167	2.5
Bow Island	4,132	5,592	.7
Medicine Hat	12,173	12,891	.9
Alfersyde	7,087	3,055	2.6
High River	1,526	425	3.5
Drumheller	377,618	142,546	2.5
Big Valley	16,478	475	36.7
Brooks	10,917	5,845	1.8
Hanna	25,048	5,960	4.2
Lacombe	18,803	9,150	2.0
Trochu	12,898	11,125	1.1
Three Hills	15,120	6,335	2.3
Carbon	5,091	3,925	1.2
Battle River	10,352	175	59.1
Camrose	52,588	60	876.4
Tofield	67,963	4,275	15.6
Clover Bar	204,546	48,691	4.2
Edmonton	111,907	21,464	5.2
Namoo	12,379	16	773.6
Cardiff	236,433	72,443	3.2
Wabamun	7,475		
Pembina	72,746	10,134	7.1
Peace River	390		
Total	2,172,801	555,986	3.9

The following table shows the number of tons of BITUMINOUS coal produced per pound of explosive used:

District	No. of Tons mined	No. of Lbs. of Explosive used	Tons of coal mined per lb. of Explosive used
Crow's Nest Pass	1,402,636	115,195	12.1
Canmore	281,387	57,040	4.9
Brazeau	289,768	1,933	149.9
Jasper Park	152,504	8,706	17.5
Yellowhead Pass	69,426	21,535	3.2
Mountain Park	139,538	22,600	6.3
Total	2,335,259	226,409	10.3

The following table shows the number of tons of ANTHRACITE coal produced per pound of explosive used.

District	No. of Tons mined	No. of Lbs. of Explosive used	Tons of coal mined per lb. of Explosive used
Banff	140,544	30,800	4.5

Estimated number of shots fired in the LIGNITE Coal Field:

District	Squibs	Fuse	Electric Detonator	Electric Squib	Total
Pincher Creek	90	1,577	136		1,803
Lethbridge	44,980	11,666	46,836	49,951	153,433
Magrath	1,115				1,115
Milk River	7,432	1,240			8,672
Taber	19,457	70	30		19,557
Bow Island	6,673				6,673
Medicine Hat	6,400	1,500			7,900
Aldersyde	5,440	60			5,500
High River		560			560
Drumheller	22,100	47,990	94,905	3,135	168,130
Big Valley		300			300
Brooks	3,200	15,030			18,230
Hanna	2,650	6,800			9,450
Lacombe	2,443	4,906			7,349
Trochu	4,890	18,040			22,930
Three Hills	819	6,200			7,019
Carbon	3,340	225	50		3,615
Battle River	80	110			190
Camrose		125			125
Toffield	35	2,875			2,910
Clover Bar	38,621		2,246		40,867
Edmonton	8,180		23,434		31,614
Namoo		48			48
Cardiff		55,256			55,256
Wabamun					
Pembina			12,044		12,044
Peace River					
Total	177,945	174,578	179,681	53,086	585,290

Estimated number of shots fired in the BITUMINOUS Coal Field:

District	Fuse	Electric Detonator	Total
Crow's Nest Pass		155,987	155,987
Canmore		87,560	87,560
Brazeau	4,500	337	4,837
Jasper Park	1,369	11,576	12,945
Yellowhead Pass		22,110	22,110
Mountain Park		33,706	33,706
Total	5,869	311,276	317,145

DEPARTMENT OF PUBLIC WORKS

Estimated number of shots fired in the ANTHRACITE Coal Field:

District		Electric Detonator	Total
Banff		29,000	29,000

Number of Miss-Fire Shots recorded in the LIGNITE Coal Mines:

District	METHOD OF SHOT-FIRING				Total
	Squibs	Fuse	Electric Detonator	Electric Squib	
Pincher Creek	4				4
Lethbridge	12	2	29	253	296
Magrath					54
Milk River	52	2			21
Taber	20		1		12
How Island	12				48
Medicine Hat	48				42
Aldersyde	42				
High River					183
Drumheller		24	85	74	
Big Valley					11
Brooks		11			27
Hanna	10	17			21
Lacombe		21			23
Trochu		23			23
Three Hills		23			2
Carbon		1	1		5
Battle River	5				
Camrose					12
Tofield		12			29
Clover Bar		29			35
Edmonton		33	2		
Namoo					52
Cardiff		52			
Wabamun			2		2
Pembina					
Peace River					
Total	205	250	120	327	902

Number of Miss-Fire Shots recorded in the BITUMINOUS Coal Mines:

District	METHOD OF SHOT-FIRING			Total
	Fuse	Electric Detonator		
Crow's Nest Pass		98		98
Canmore		25		25
Brazeau	31	6		37
Jasper Park	1	2		3
Yellowhead Pass		35		35
Mountain Park		25		25
Total	32	191		223



ROSEDALE COAL AND CLAY PRODUCTS COMPANY, LIMITED.



NORTH AMERICAN COLLIERIES, LTD., EVANSBURGH.



COALHURST MINE, NORTH AMERICAN COLLIERIES, LIMITED.



MAIN ENTRY IN MINE OF ROSEDALE COAL & CLAY PRODUCTS COMPANY, LIMITED.

Number of Miss-Fire Shots recorded in the ANTHRACITE Coal Mines:

District	METHOD OF SHOT-FIRING				Total
			Electric Detonator		
Banff			16		16

No statistics are available as to the cause of miss-fires.

The following table shows the quantity of Explosives used in pounds for blasting rock in Coal Mines in the Province:

District	NAME OF EXPLOSIVE					Total
	Monobe	Polar Permitite	Black Powder	Dyna-mite	Samson-ite	
Crow's Nest Pass		8,909				8,909
Pincher Creek	60		500	1,550		2,110
Lethbridge			50	4,529		4,579
Magrath						
Milk River						
Taber	15		50	4,430		4,495
Bow Island			150	10		160
Medicine Hat				60		60
Aldersyde			65	26		91
High River						
Canmore	940	4,650			4,000	9,590
Banff		28,250				28,250
Drumheller	2,389			100		2,489
Big Valley						
Brazeau				225		225
Brooks				15		15
Hanna						
Lacombe						
Trochu			1,000			1,000
Three Hills	16			50		66
Carbon						
Battle River						
Camrose						
Tofield						
Clover Bar						
Edmonton	1,077					1,077
Namoo						
Cardiff						
Wabamun						
Pembina						
Jasper Park	58	3,731		16		3,805
Yellowhead Pass				600		600
Mountain Park		3,425				3,425
Peace River						
Total	4,555	48,965	1,815	11,611	4,000	70,946

ELECTRICITY.

According to the returns received from the different mines, electricity was used at 41 mines in 1916. The Crow's Nest Pass and Drumheller districts were the most active in this respect during the year, as will be seen from the following:

Crow's Nest Pass District	7 mines using electricity
Lethbridge	4 " " "
Taber	3 " " "
Canmore	2 " " "
Banff	1 " " "
Drumheller	8 " " "
Brazeau	1 " " "
Three Hills	1 " " "
Clover Bar	3 " " "
Edmonton	2 " " "
Cardiff	2 " " "
Pembina	1 " " "
Jasper Park	2 " " "
Yellowhead Pass	3 " " "
Mountain Park	1 " " "

The Rules for the Installation and Use of Electricity in or about Mines require a return to be made to the department on or before January 21st of each year, giving size, type and any other particulars which may be required of electrical apparatus in use above and below ground in such mines as are governed by the provisions of The Mines Act. A summary of this return as regards the horsepower of electrical apparatus in use is given below:

District.	Above Ground	Below Ground	Total
	H.P.	H.P.	H.P.
Crow's Nest Pass	2,278	400	2,678
Lethbridge	671	175	846
Taber	64	305	369
Canmore	350	125	475
Banff	230	...	230
Drumheller	343	41	384
Brazeau	690	...	690
Three Hills	10	...	10
Clover Bar	50	...	50
Edmonton	50	...	50
Cardiff	110	95	205
Pembina	110	241	351
Jasper Park	192	...	192
Yellowhead Pass	75	...	75
Mountain Park	175	65	240

A closer estimate of the extent to which electricity is used in the different districts may be made by considering the number of tons of coal raised per electrical horsepower employed in all the mines under The Mines Act. The following table will give this information:

TONS OF COAL PER ELECTRICAL HORSE-POWER EMPLOYED.

District	Tons of coal mined in 1916	Above ground	Below ground	Total above and below ground
Crow's Nest Pass	1,402,636	615	3,506	520
Pincher Creek	3,867			
Lethbridge	740,022	1,102	4,228	874
Magrath	1,247			
Milk River	5,577			
Taber	139,318	2,176	456	377
Bow Island	4,132			
Medicine Hat	12,173			
Aldersyde	7,087			
High River	1,526			
Canmore	281,387	803	2,251	592
Banff	140,544	611		611
Drumheller	377,618	1,100	9,210	983
Big Valley	16,478			
Brazeau	289,768	419		419
Brooks	10,917			
Hanna	25,048			
Lacombe	18,803			
Trochu	12,898			
Three Hills	15,120	1,512		1,512
Carbon	5,091			
Battle River	10,352			
Camrose	52,588			
Tofield	67,063			
Clover Bar	204,546	4,090		4,090
Edmonton	111,907	2,238		2,238
Namoo	12,379			
Cardiff	236,433	2,149	2,488	1,153
Wabamun	7,475			
Pembina	72,746	661	301	207
Jasper Park	152,504	794		794
Yellowhead Pass	69,426	925		925
Mountain Park	139,538	797	2,146	581
Peace River	390			

This table is useful to show by comparison with other years the growth or decline in the use of electricity in the Province as a whole and in each district taken separately.

The number of electrically driven coal-cutting machines in use at the end of the year was eight.

No accidents were reported in connection with the use of electricity during the year.

COAL-CUTTING MACHINERY.

District	No. of coal cutting machines operated by:		Tons of coal mined by	
	Electricity	Compress- ed Air	Electricity	Compress- ed Air
Crow's Nest Pass				
Pincher Creek				
Lethbridge		87		585,641
Magrath				
Milk River				
Taber	1	43	1,190	105,483
Bow Island				
Medicine Hat		3		2,400
Aldersyde				
High River				
Canmore		3		60,000
Banff				
Drumheller		4		26,900
Big Valley				
Brazeau				
Brooks				
Hanna				
Lacombe				
Trochu		1		4,000
Three Hills		3		3,450
Carbon				
Battle River				
Camrose				
Tofield				
Clover Bar		4		22,030
Edmonton		9		64,412
Namoo				
Cardiff	3		146,743	
Wabamun				
Pembina	4		52,664	
Jasper Park				
Yellowhead Pass		3		14,813
Mountain Park				
Peace River				
Total	8	160	200,597	889,129

The following tables are taken from reports issued by the Department of Mines, Ottawa. It will be noted, however, that the amount of coal stated in these tables as being produced each year differs slightly from the amount shown by the provincial reports. The particulars for the year 1916 have not yet been received.

ANNUAL PRODUCTION OF COAL IN ALBERTA.

Calendar Year	Short tons	Value	Average per ton
1887	74,152	\$ 157,577	\$2.13
1888	115,124	183,354	1.59
1889	97,364	179,640	1.85
1890	128,753	198,298	1.54
1891	174,131	437,243	2.51
1892	178,970	460,605	2.57
1893	230,070	586,260	2.55
1894	184,940	473,827	2.56
1895	169,885	382,526	2.25
1896	209,162	581,832	2.78
1897	242,163	630,408	2.60
1898	315,088	788,720	2.50
1899	309,600	774,000	2.50
1900	311,450	778,625	2.50
1901	340,275	850,687	2.50
1902	402,819	960,601	2.38
1903	495,893	1,117,541	2.25
1904	661,732	1,404,524	2.12
1905	931,917	1,993,915	2.14
1906	1,246,360	2,614,762	2.10
1907	1,591,579	3,826,286	2.41
1908	1,685,661	4,127,311	2.45
1909	1,994,741	4,838,109	2.43
1910	2,894,469	7,065,736	2.44
1911	1,511,036	3,979,264	2.63
1912	3,240,577	8,113,525	2.50
1913	4,014,755	10,418,941	2.59
1914	3,683,015	9,350,392	2.54
1915	3,360,818	8,283,079	2.46

MINERAL PRODUCTION IN ALBERTA, 1914 AND 1915.

Product	1914		1915	
	Quantity	Value	Quantity	Value
Gold (ozs.)	48	\$ 992	195	\$ 4,026
Coal(tons)	3,683,015	9,350,392	3,360,818	8,283,079
Natural Gas (M. cu. ft.)	7,172,157	1,214,670	4,481,947	1,022,814
Cement (bbls.)	641,395	1,212,342	233,648	415,009
Clay Products		463,199		115,696
Lime (bus.)	280,252	58,321	74,152	14,445
Sand-lime Brick (No.)	5,453,000	49,731	764,700	6,191
Stone		60,272		890
Other Products		275,315		47,197
Total Value		\$12,684,234		\$9,909,347

ACCIDENTS.

Summary table showing Accidents occurring in Mines during 1906 to 1916 inclusive:

Year	Output	Accidents			Tons of Coal Mined Per Accident		
		Fatal	Serious	Slight	Fatal	Serious	Slight
1906	1,385,000	10	11	20	138,500	125,909	69,250
1907	1,834,745	19	18	68	96,565	101,930	26,981
1908	1,845,000	11	38	13	167,727	48,552	141,923
1909	2,174,329	9	42	18	241,952	51,769	120,796
1910	3,036,757	61*	41	58	49,782	71,067	52,375
1911	1,694,564	7	32	45	242,080	52,955	37,656
1912	3,446,349	21	38	58	164,111	90,693	59,419
1913	4,306,346	28	60	83	153,789	71,772	51,883
1914	3,821,739	209**	44	50	18,286	86,857	76,434
1915	3,434,891	18	33	33	190,827	104,087	104,087
1916	4,648,604	20	51	34	232,430	91,149	136,723
Total	31,628,324	413	408	480	76,581	77,520	65,892

*Including thirty-one deaths caused by the Bellevue explosion.

**Including one hundred and eighty-nine deaths caused by Hillcrest explosion.

Table showing accidents during 1916 classified according to the coal field in which they occurred:

District	Output	Accidents			Tons of Coal Mined Per Accident		
		Fatal	Serious	Slight	Fatal	Serious	Slight
Lignite	2,172,801	9	28	20	241,422	77,600	108,640
Bituminous	2,335,259	10	22	13	233,525	106,148	179,635
Anthracite	140,554	1	1	1	140,554	140,554	140,554

Classification of accidents according to outputs of mines which produced during 1916:

	Under 10,000 Tons	From 10,000 to 50,000 Tons	From 50,000 to 100,000 Tons	From 100,000 to 200,000 Tons	From 200,000 to 300,000 Tons	From 300,000 to 1,000,000 Tons	Total
Fatal	2	2	2	2	12	.....	20
Serious	3	7	10	14	14	3	51
Slight	6	7	2	9	9	1	34
Total	11	16	14	25	35	4	105

The following tables show the number of tons produced per accident:

LIGNITE COAL MINES.

District	Output	No. of Men Employed	No. of Tons Produced Per Accident			
			Fatal	Serious	Slight	Total
Pincher Creek	3,867	12	3,867	.....	.....	3,867
Lethbridge	740,022	1,348	123,337	82,244	105,717	33,637
Magrath	1,247	5	.....	.....	.....	.....
Milk River	5,577	18	.....	.....	.....	.....
Taber	139,318	288	.....	69,659	.....	69,659
Bow Island	4,132	28	.....	.....	.....	.....
Medicine Hat	12,173	38	.....	.....	.....	.....
Aldersyde	7,087	27	.....	.....	.....	.....
High River	1,526	11	.....	.....	.....	.....
Drumheller	377,618	843	188,809	75,523	47,202	25,174
Big Valley	16,478	37	.....	16,478	16,478	8,239
Brooks	10,917	23	.....	.....	.....	.....
Hanna	25,048	64	.....	.....	.....	.....
Lacombe	18,803	108	.....	18,803	.....	18,803
Trochu	12,898	40	.....	.....	.....	.....
Three Hills	15,120	77	.....	.....	.....	.....
Carbon	5,091	20	.....	.....	.....	.....
Battle River	10,352	48	.....	.....	.....	.....
Camrose	52,588	93	.....	26,294	.....	26,294
Tofield	67,063	85	.....	.....	.....	.....
Clover Bar	204,546	298	.....	204,546	.....	204,546
Edmonton	111,907	217	.....	.....	37,302	37,302
Namoo	12,379	42	.....	.....	.....	.....
Cardiff	236,433	212	.....	47,286	.....	47,286
Wabamun	7,475	35	.....	.....	7,475	7,475
Pembina	72,746	100	.....	36,373	.....	36,373
Peace River	390	15	.....	.....	.....	.....
Total	2,172,801	4,132	241,422	77,600	108,640	38,119

BITUMINOUS COAL MINES.

Crow's Nest Pass ...	1,402,636	1,719	280,527	140,263	155,848	53,947
Canmore	281,387	370	281,387	140,693	281,387	70,346
Brazeau	289,768	406	144,884	96,589	289,768	48,294
Jasper Park	152,504	254	76,252	30,500	.....	21,786
Yellowhead Pass ...	69,426	188	.....	69,426	.....	69,426
Mountain Park	139,538	205	.....	139,538	.....	139,538
Total	2,335,259	3,142	233,525	106,148	179,635	51,894

ANTHRACITE COAL MINES.

Banff	140,544	296	140,544	140,544	140,544	46,848
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LIST OF ACCIDENTS WHICH HAVE OCCURRED IN THE LIGNITE FIELD DURING 1916.

DATE	MINE	NAME	AGE	OCCUPATION	DETAILS
Jan. 5	Battle River Collieries, Lt.	A. Luiskopski	27	Machineman	Was caught between car and timber on main entry. Broken collar bone.
Jan. 5	Canadian Pac. Ry. (No. 6 Shaft) Lethbridge	Thomas Tennant	20	Weighman	Was caught between wheel and rail joint at end of scale. Right foot cut and bruised.
Jan. 8	Red Deer Valley Coal Co., Ltd.	Peter Solik	35	Miner	Started to return to his place while shot was being fired. Slight injuries to face by flying coal.
Jan. 16	Canadian Pac. Ry. (No. 6 Shaft) Lethbridge	George Stafford	37	Weighman	Fell off moving box car. Broken bone in foot.
Jan. 17	The Spicer Coal Co., Ltd.	Howard Dix	22	Laborer	Fell off scaffolding at tippie.
Jan. 26	Canadian Coal & Coke Co., Ltd., Coalhurst	Herbert Skidmore	17	Slate-picker	Compound fracture of left forearm. Caught in gearing on slack conveyor. Left arm taken off between wrist and elbow.
Jan. 27	Rosedale Coal and Clay Products, Ltd.	Elston L. Short	27	Miner	Was barring down block of coal when coal fell over. Broken leg.
Jan. 29	Consumers' Co-Operative Co., Ltd., Big Valley	James Hubbs	29	Driver	Was coupling cars when horse started, crushing him between car and timber. Bruised shoulders.
Feb. 2	Canadian Pac. Ry. (No. 6 Shaft) Lethbridge	J. Buga	34	Coal-loader	Struck by piece of top rock. Bad cut over right eye and head bruised.
Feb. 3	Canadian Pac. Ry. (No. 3 Shaft) Lethbridge	G. Starb	21	Coal-loader	Slipped and fell while pushing car out of room, striking his shoulder against a prop. Dislocated shoulder.
Feb. 4	Cardiff Collieries, Ltd.	Robert Arit	30	Miner	Was pushing down trip of empties when runaway car knocked him down. Two ribs and collar bone fractured.

LIST OF ACCIDENTS, ETC.—Continued.

DATE	MINE	NAME	AGE	OCCUPATION	DETAILS
Feb. 11	North American Collieries, Ltd., Coalhurst	David Thompson	26	Car repairer	Was crossing railway track when he was struck by rock cars and locomotive which passed over him. Fatal.
Feb. 14	Pembina Coal Operators, Ltd.	John McDiarmid	28	Switchman	Was standing on siding at shaft bottom signalling trip and was pulled in between cars and centre props. Broken pelvic bones and internal injuries.
Feb. 15	Unleased land	Peter Sylvester	22	Farmer	Fall of roof rock. Fatal.
Feb. 18	Canadian Pac. Rly. (No. 6 Shaft) Lethbridge	William Harrison	17	Driver	Fell in front of loaded car on curve. Fatal.
Feb. 24	Rose-Deer Coal Mining Co., Ltd.	John Traynor	23	Teamster	While riding a horse to stable horse slipped and fell on him. Both bones in left leg broken.
Apr. 3	North American Collieries, Ltd., Coalhurst	Ernest Mallett	25	Driver	Was crushed between a car and timber. Fatal.
Apr. 18	Rosedale Coal and Clay Products Co., Ltd. M. Guski	M. Guski	30	Laborer	Heavy plank used as lever to raise building, on which Guski was kneeling, broke. He fell to the ground. Broken kneecap.
May 5	North American Collieries Ltd., Coalhurst	P. Pentelcinek	25	Driver	Crushed against roof when loaded car drawn by horse was derailed, causing hemorrhage of the brain. Fatal.
May 8	Premier Coal Co., Elcan	Henry Brooks	43	Miner	Fell on iron bar while walking along entry. Bad wound in abdomen.
May 10	Canadian Pac. Rly. (No. 3 Shaft) Lethbridge	Nestor Hincu	20	Gripper	Foot jammed between grip and rail while grip was on cable. Fractured ankle.
May 12	Cardiff Collieries, Ltd.	Nat. Cloke	35	Driver	Crushed between empty car and timbers. Collar bone fractured on left side and bruised ribs on right side.

DEPARTMENT OF PUBLIC WORKS

LIST OF ACCIDENTS, ETC.—Continued.

DATE	MINE	NAME	AGE	OCCUPATION	DETAILS
May 18	North American Collieries, Ltd., Coalhurst.	Rothen Hanslor	28	Driver	Fell in front of derailed cars. Run-away horse. Wound of scrotum and bruises of right leg and ankle.
June 16	Sterling Coal Co., Ltd.	Frank Sobkoviak	26	Laborer	Fell in sump and was drowned.
June 28	Canadian Pac. Rly. (No. 3 Shaft) Lethbridge	George Nagy	49	Coal-loader	Fall of rock from slip in roof. Right leg broken.
June 30	North American Collieries, Ltd., Coalhurst.	Piere Giuseppe	27	Loader	Fall of coal from face of room. Compound fracture of right leg.
July 31	Canadian Pac. Rly. (No. 3 Shaft) Lethbridge	Mike Pinchak	9	Not employed at mine	Attempted to pass through under timber cage. Crushed about chest and back, internal injuries.
Aug. 11	The Star Coal Mines, Ltd.	Jack Berlando	39	Miner	Fall of rock from roof. Broken rib and bruised side and shoulder.
Aug. 11	North American Collieries, Ltd., Coalhurst.	H. Kitunski	40	Miner	Stepped in front of loaded cars. Fatal.
Aug. 28	Grace Coal Mine.	Philip Saputo	42	Miner	Fall of rock from roof. Foot crushed.
Sept. 5	North American Collieries, Ltd., Coalhurst.	Sam. Kendrick	29	Cager	Compressed air line burst at joint, piece of pipe struck him on the head. Fractured skull.
Sept. 9	North American Collieries, Ltd., Pembina.	John Blydink	19	Box car-trimmer	Was lowering railway car, got his hand caught in brake of car retarded. Fractured both arms, lacerated left arm and fingers on both hands.
Sept. 11	Midland Collieries, Ltd.	Arthur Court	25	Rope-rider	Runaway empty cars from tippie to foot of slope. Compound fracture of left leg and ribs fractured, also internal injuries.
Sept. 20	The Star Coal Mines, Ltd.	John Cardovado	26	Miner	Preparing shot when open light fell into powder. Burns on arms and body.

LIST OF ACCIDENTS, ETC.—Continued.

DATE	MINE	NAME	AGE	OCCUPATION	DETAILS
Oct. 2	Red Deer Valley Coal Co., Ltd.	Louis Callegan	36	Shaft-sinker	Lagging dropped down shaft and struck him on foot. Bruised toes and instep.
Oct. 8	North American Collieries, Ltd., Coalhurst.	John Koller	39	Pump and pipe man.	Was carrying a piece of pipe, fell with the pipe across his arm. Compound fracture of left forearm.
Oct. 10	West Commercial Co., Ltd.	John Kobynik	33	Miner	Struck by derailed car on slope. Bruised leg and ankle.
Oct. 14	North American Collieries, Ltd., Coalhurst.	Joseph Perini	27	Loader	Ignition of gas from shot. Arm, neck and face singed.
Oct. 20	Cardiff Collieries, Ltd.	Mike Mitzcan	33	Miner	Fall of top coal. Compound fracture of left leg below the knee.
Oct. 25	Canadian Pac. Rly. (No. 3 Shaft) Lethbridge	John Onofreyczuk	43	Loader	Fall of roof slate. Injured knee.
Oct. 27	Canadian Pac. Rly. (No. 6 Shaft) Lethbridge	Nik. Coznuk	24	Driver	Hand crushed between derailed car and timber. Left hand badly crushed.
Oct. 27	Dawson Coal Co., Ltd.	J. Patoski	24	Miner	Ignition of small quantity of gas by open light. Hair and eyelashes singed.
Oct. 30	Canada West Coal Co., Ltd.	John Stefnek	54	Loader	Small cave of rock. Right thigh broken, cut over right eye.
Nov. 8	McPeak Coal Co.	Jack Jones	25	Repairer	Ignition of gas by open lights. Slight burns on back of hands and neck.
Nov. 8	McPeak Coal Co.	William Mauryki	27	Repairer	Ignition of gas by open lights. Slight burns on back of hands and neck.
Nov. 10	The Rose-Deer Coal Mining Co., Ltd.	Charles Martinsen	32	Miner	Fall of cap rock. Severing of small artery at back of right knee joint.
Nov. 10	North American Collieries, Ltd., Coalhurst.	Chris Rest	28	Driver	Fell in front of derailed cars. Fatal.
Nov. 13	Humberstone Coal Co.	James Thompson	25	Carpenter	Arm caught in fan. Fractured arm.
Nov. 18	The Drumbheller Land Co., Ltd.	J. Salvador	32	Miner	Fall of cap rock. Simple fracture of right leg.

LIST OF ACCIDENTS, ETC.—Continued.

DATE	MINE	NAME	AGE	OCCUPATION	DETAILS
Nov. 20	The Rose-Deer Coal Mining Co., Ltd.	John Pollak	45	Miner	Premature ignition of powder, struck by flying coal. Injury to left side of face and head.
Nov. 22	The Star Coal Mines, Ltd.	Henry Harke	25	Miner	Fall of rock from roof. Back bruised.
Dec. 1	Cardiff Collieries, Ltd.	George Bruce	40	Weighman	Foot caught between sliding and stationary rails on the dump. Large wound under ankle, fracture of small bones in foot and instep.
Dec. 1	Cardiff Collieries, Ltd.	Herman Kastinna	45	Carpenter	Repairing mine car which fell on his leg. Fracture above the ankle.
Dec. 8	A. D. McCormack	William E. Butler	21	Driver	Struck by corner of mine car. Dislocated hip joint.
Dec. 8	Big Valley Collieries, Ltd.	W. A. Mount	60	Miner	Piece of top coal fell on him while he was engaged in undercutting. Broken collar bone.
Dec. 9	Island Lake Coal Co., Ltd.	Louis Raser	43	Miner	Fell against derailed car. Face cut.
Dec. 17	Link Coal Co.	Charles Lipa	52	Miner	Fall of rock from roof. Broken back. Fatal.

LIST OF ACCIDENTS WHICH HAVE OCCURRED IN THE BITUMINOUS FIELD DURING 1916.

DATE	MINE	NAME	AGE	OCCUPATION	DETAILS
Jan. 5	Canmore Coal Co., Ltd.	Basilio Bovio	26	Miner	Fall of rock roof at fault in main entry. Bruised right leg.
Jan. 13	Georgetown Collieries, Ltd.	William Ribka	46	Miner	Fall of roof rock while placing timber.
Feb. 8	Hillcrest Collieries, Ltd.	Andrew Sekella	20	Cager	Left leg broken above ankle.
Feb. 14	International Coal and Coke Co., Ltd.	Oscar Leleux	29	Miner	Foot caught by loaded cars at switch. Toes severely crushed.
Mar. 3	Brazeau Collieries, Ltd.	W. J. Wright	44	Tracklayer's helper	Asphyxiated by gas when putting crosscut through. Fatal.
Mar. 9	Franco-Canadian Collieries, Ltd.	Geo. Ulbasha	40	Miner	While stepping between loaded cars the cars were bumped, catching his leg. Broken leg.
Mar. 10	Georgetown Collieries, Ltd.	Andre Dolinsky	43	Miner	Was timbering cave on new slope when piece of rock fell, striking him. Leg broken and head cut.
Mar. 20	Jasper Park Collieries, Ltd.	Patric Octavio	33	Timberman	Fall of top coal after shot. Compound fracture of left leg. Fatal.
Mar. 20	Jasper Park Collieries, Ltd.	Giuseppe Palumbo	50	Ditchman	Caught by post while riding on locomotive and knocked off same, crushed between cars and timbers. Right leg broken below knee.
Mar. 20	Brazeau Collieries, Ltd.	W. Russell	35	Miner	Crushed while coupling loaded mine cars in motion. Broken collar bone.
Apr. 8	Franco-Canadian Collieries, Ltd.	Nik Wynnichuk	35	Chute loader	Fall of coal from face of main entry striking him on left leg. Fracture of leg.
Apr. 10	West Canadian Collieries, Ltd., Greenhill	F. Vermillion	25	Miner	Fell in chute and was covered by coal. Fatal.
					Taking down top coal when lump struck him on leg. Broken leg.

LIST OF ACCIDENTS, ETC.—Continued.

DATE	MINE	NAME	AGE	OCCUPATION	DETAILS
Apr. 13	West Canadian Collieries, Ltd., Greenhill...	Tom Wilkinson	41	Dumper	Spragging cars on tippie, thumb jammed between sprag and wheel. Broken thumb.
Apr. 17	Brazeau Collieries, Ltd.	Pete Pastor	29	Miner	Was loading coal when bench coal slid over on him. Fatal.
Apr. 29	Canmore Coal Co., Ltd.	James Neill	45	Carpenter	Knocked down by trip of loaded cars at bottom of No. 15 Jig Stewart seam. Collar bone dislocated.
May 21	Hillcrest Collieries, Ltd.	Thomas Brown	42	Hoisting engineer	Struck on leg by end of hoisting cable. Broken leg.
May 26	West Canadian Collieries, Ltd., Greenhill...	T. Jenson	24	Miner	Fell off scaffolding at face of room. Bruised head and back.
June 1	International Coal & Coke Co., Ltd.	Jos. Pietraski	33	Laborer	Was backing horse attached to cart into claypit when horse ran away, throwing him out of cart. Right leg fractured.
June 4	Brazeau Collieries, Ltd.	Bill Korchuk	22	Jigger	Loaded car ran away from face of No. 1 room and struck empty car attached to rope at bottom, this pulled the McGinty post out at face of room, letting down fall of rock. Fatal.
June 12	The Mountain Park Coal Co., Ltd.	Fred Kozlo	29	Miner	Fall of rock at face of pillar. Fractured skull.
June 14	Jasper Park Collieries, Ltd.	Placiolo Giaccchino	35	Miner	Cleaning cave on main entry fall of rock and coal knocked him down on to handle of drill, breaking ribs and causing internal injuries. Fatal.

LIST OF ACCIDENTS, ETC.—Continued.

DATE	MINE	NAME	AGE	OCCUPATION	DETAILS
June 16	Jasper Park Collieries, Ltd.	Walter Wrigley	35	Miner	Piece of rock fell on him while he was cleaning up coal, knocking him down angle. Badly bruised arms, legs and body.
June 20	Hillcrest Collieries, Ltd.	Nick Worabak	30	Bucker	Bucking coal down chute when pieces of rock fell on his hand. Three fingers crushed.
June 26	West Canadian Collieries, Ltd., Greenhill.	C. Sorrie	30	Miner	Shot blew through crosscut, struck by flying coal. Scalp wound.
June 27	Brazeau Collieries, Ltd.	J. Rickart	46	Miner	Timbering cave on main entry piece of rock fell striking him on the arm. Broken arm.
July 4	International Coal & Coke Co., Ltd.	Mike Goraz	21	Locomotive engineer	Crushed while coupling mine cars.
July 5	Hillcrest Collieries, Ltd.	Ernesto Zagaglione	25	Miner	Lower part of body injured.
July 7	Brule Lake Coal Co., Ltd.	John McDowell	27	Miner	Fall of rock in pillar. Crushed spine. Fatal.
July 10	West Canadian Collieries, Ltd., Greenhill.	P. Manarin	25	Miner	Fall of roof rock in entry. Neck broken. Fatal.
July 11	Brule Lake Coal Co., Ltd.	Kondro Morris	30	Miner	Fall of cap rock and roof coal. Scalp wound.
July 17	Jasper Park Collieries, Ltd.	John Chesney	30	Miner	Fall of roof rock in room. Broken leg.
July 19	West Canadian Collieries, Ltd. (Bellevue No. 2 mine)	S. Parker	39	Miner	Fall of coal knocked him down chute. Four ribs broken.
Aug. 2	West Canadian Collieries, Ltd., Bellevue mine	F. LesKosek	40	Miner	Fall of top coal in pillar while setting timber. Broken collar bone and rib.
					Fall of coal in pillar knocked out timber, which fell on him. Broken leg.

LIST OF ACCIDENTS, ETC.—Continued.

DATE	MINE	NAME	AGE	OCCUPATION	DETAILS
Aug. 3	Franco-Canadian Collieries, Ltd.	Nike Lalich	28	Miner	Struck by flying rock from shot. Slight contusions on side of head.
Aug. 13	International Coal & Coke Co., Ltd.	J. Pavalousse	37	Chute loader	Slipped and fell under moving car, wheels striking his chest. Two ribs broken.
Aug. 15	West Canadian Collieries, Ltd.	J. Burrows	40	Miner	Fall of coal in pillar. Crushed pelvis.
Aug. 31	Franco-Canadian Collieries, Ltd.	E. Marcoli	29	Miner	Crushed between timber and runaway car. Hips bruised.
Sept. 27	Franco-Canadian Collieries, Ltd.	Joseph Laura	25	Driver	Struck by piece of coal from runaway car on slope. Head cut.
Oct. 24	Hillcrest Collieries, Ltd.	Albert Nikoma	20	Driver boss	When re-railing a trip of loaded cars on slope rope broke, cars ran back and knocked him down, taking his leg off at knee. Fatal.
Oct. 30	McGillivray Creek Coal & Coke Co., Ltd.	Steve Billesky	27	Miner	Piece of rock slipped off fault in crosscut and crushed him. Left leg and two ribs broken.
Nov. 2	Hillcrest Collieries, Ltd.	Fryd Iwaniczuk	40	Timber packer	Packing timber up chute when roof caved, burying him. Fatal.
Dec. 4	Saunders Creek Coal Co., Ltd.	Christ Rasmussen	40	Box car	Piece of coal fell off car making him unconscious. Ear cut and shoulder bruised.
Dec. 7	International Coal & Coke Co., Ltd.	McKean Hunter	39	Miner	Piece of rock fell on him from roof. Two ribs on left side broken, with internal hemorrhage.
Dec. 12	West Canadian Collieries, Ltd., Bellevue	W. McKulloch	75	Trimmer slate picker	Breaking rock a piece hit him in the eye, cutting it.
Mar. 14	North American Collieries, Ltd.	Mike Berana	45	Miner	Fall of roof coal in pillar. Fractured shoulder blade.

LIST OF ACCIDENTS WHICH HAVE OCCURRED IN THE ANTHRACITE MINES DURING 1916.

DATE	MINE	NAME	AGE	OCCUPATION	DETAILS
Jan. 10	Canadian Pac. Rly., Bankhead mine	Paul Indek	45	Miner's helper	Preparing to put up timber, cap rock fell striking him on leg. Left leg broken above the ankle.
June 7	Canadian Pac. Rly., Bankhead mine	Frank Dzierwas	37	Miner	Piece of rock fell from roof. Bruised leg.
July 10	Canadian Pac. Rly., Bankhead mine	Angelo Maschio	24	Miner's helper	Was pushing loaded car from face of entry and ran into empty cars which were being pushed in by air motor. He was knocked down and run over. Fatal.

FATAL ACCIDENTS.

Twenty fatal accidents occurred during the year, one of which occurred above ground and nineteen underground.

The fatal accident which occurred to David Thompson on February 11th, 1916, at the mine operated by the North American Collieries, Ltd., Coalhurst, was caused by his being knocked down by rock cars. He was crossing the railway track when he was struck by the rock cars and the locomotive, which passed over him.

The fatal accident which occurred to Oscar Lelux on February 14th, 1916, in the mine operated by the International Coal & Coke Co., Ltd., near Coleman, was caused while he and his partner were driving their place through to a crosscut where there was an accumulation of gas. They had got a hole through and the partner went down to the entry to get a lamp relighted and left Lelux in the chute at the crosscut. On his return he found Lelux unconscious about ten feet below the crosscut. He was suffocated by the gas.

The fatal accident which occurred to Peter Wilhelm Sylvester on February 15th, 1916, in the mine being operated on unleased land twenty-three miles southeast of Drumheller by farmers, who were digging their own coal, was caused by a fall of roof rock. Sylvester had fired a shot and then went outside and had his lunch. About an hour after he returned to start getting the coal outside, when the rock fell and killed him.

The fatal accident which occurred to William Harrison on February 18th, 1916, in No. 6 shaft of the C. P. Railway Company Department of Natural Resources, near Lethbridge, was caused by his falling in front of a loaded car on a curve, receiving injuries from which he died on 19th February, 1916.

The fatal accident which occurred to Andre Dolinsky on March 10th, 1916, in the mine operated by The Georgetown Collieries, Ltd., near Canmore, was caused by a fall of top coal. A shot had been fired and the top coal fell on his leg, smashing it, from which he died on March 21st, 1916.

The fatal accident which occurred to Ernest Mallett on April 10th, 1916, in the mine operated by the Georgetown Collieries, Ltd., Ltd., at Coalhurst, was caused by Mallett being caught between cars and timber. He was taking out a full car of coal when the horse took the wrong road, and Mallett was crushed between the cars and timber.

The fatal accident which occurred on April 8th, 1916, to Nik. Wynnycyuk, in the mine operated by the Franco-Canadian Collieries, Ltd., at Frank, was caused by his falling in a chute and being smothered by coal.

The fatal accident which occurred to Pete Pastor on April 17th, 1916, in the mine operated by Brazeau Collieries, Ltd., at Nordegg, was caused by a fall of bench coal, which crushed Pastor against the McGinty post and killed him.

The fatal accident which occurred to Peter Pentelciuik on May 5th, 1916, in the mine operated by the North American Collieries, Ltd., Coalhurst, was caused by his head being crushed against the

roof. He was hauling a loaded car when the rear end of the car became derailed, jerking the front end so that his head struck against the roof, rupturing an artery.

The fatal accident which occurred to Bill Korchuk on June 4th, 1916, at No. 2 mine operated by the Brazeau Collieries, Ltd., at Nordegg, was caused by fall of cap rock. Korchuk had gone to the face of No. 1 room to let down a loaded car and must have pulled the McGinty pin instead of the safety rope, with the result that the loaded car struck the empty car at the bottom, and this knocked out the McGinty post letting down cap rock and timbers, which fell on him and killed him.

The fatal accident which occurred to Placiolo Giacchino on June 14th, 1916, in the mine operated by the Jasper Park Collieries, Ltd., at Pocatonton, was caused by a fall of coal and rock. He was preparing to drill a hole in a large block of rock which had fallen on the main entry, when some loose coal and rock fell on his shoulder, knocking him down on to the handle of the jack-hammer drill causing broken ribs and internal injuries from which he died about eight hours later.

The fatal accident which occurred to Frank Sobkowiak on June 16th, 1916, in the mine operated by The Sterling Coal Co., Ltd., near Drumheller, was caused through his being drowned in the sump. His lamp dropped in the sump and he was trying to get it out when he fell in and was drowned.

The fatal accident which occurred to Ernesto Zagaglione on July 5th, 1916, in the mine operated by the Hillerest Collieries, Ltd., near Hillerest, was caused by a fall of rock. He was mining coal in a pillar when a piece of rock fell on him from the roof crushing his spine.

The fatal accident which occurred to John McDowall on July 7th, 1916, in the mine operated by the Brule Lake Coal Co., Ltd., near Entrance, was caused by a fall of roof rock in the entry. He was placing fore poles when the rock fell out of the roof, breaking his neck.

The fatal accident which occurred to Angelo Machio on July 10th, 1916, at the Bankhead mine operated by the Department of Natural Resources of the C. P. Rly. Co., was caused by his being crushed by loaded cars. He was pushing his loaded car from the face to the side track and ran into a trip of empty cars that was being pushed in by a motor. He was knocked down and run over by the cars.

The fatal accident which occurred to H. Kitunski on August 11th, 1916, in the mine operated by the North American Collieries, Ltd., at Coalhurst, was caused by his falling in front of loaded cars. He was coming to the shaft when his light went out and apparently he became confused and got on the track in front of the trip which knocked him down and dragged him, causing injuries from which he died.

The fatal accident which occurred to Albert Nikoma on October 24th, 1916, in the mine operated by the Hillerest Collieries, Ltd., near Hillerest, was caused by his being run over by a car on the slope. He had just finished re-railing a trip of loaded cars on the

slope, when the rope broke letting the cars back, these knocked him down, cutting his leg off at the knee. He died from the effects of the accident on Nov. 4th, 1916.

The fatal accident which occurred to Fryd Zwaneyuk on November 2nd, 1916, in the mine operated by the Hillerest Collieries, Ltd., near Hillerest, was caused by a fall of roof rock in the chute. He was engaged in packing timbers up the chute when the roof caved, burying him.

The fatal accident which occurred to Chris Rest on November 10th, 1916, in the mine operated by the North American Collieries, Ltd., near Coalhurst, was caused by his falling in front of derailed cars, causing injuries from which he died.

The fatal accident which occurred to Charles Lipa on December 27th, 1916, at the mine operated by the Link Coal Company, near Pincher Creek, was caused by a fall of rock from the roof, partially burying him and breaking his back.

The following tables give the classification of accidents according to the coal field in which they occurred:

LIGNITE.

CAUSE.	ABOVE GROUND.			BELOW GROUND.		
	Fatal	Serious	Slight	Fatal	Serious	Slight
Horse Haulage, caught between car and timber					1	1
" " fell in front of loaded car on curve.				1		
" " crushed between derailed car and timber				1		1
" " crushed between roof and derailed car				1		
" " crushed between derailed empty car and timber, run- away					1	
" " fell in front of derailed cars, runaway					1	
" " stepped in front of loaded cars, no light.				1		
" " fell in front of derailed cars		1				
" " crushed by car					1	
Hand Haulage, fell against timber whilst pushing car.					1	
" " runaway car.						1
" " derailed car.						
Electric Trolley Haulage, crushed between car and timber whilst switching trolley locomotive					1	
Endless Rope Haulage, foot caught between haulage grip and rail					1	
Rope Haulage, runaway empty cars on slope					1	
Rope Haulage, derailed car on slope.						1
Fall of coal at face of room				1	3	1
Fall of rock at coal face in room					3	4
Fall of rock from roof at face of entry					1	1
Fall of rock in slope				1		
Drowned in sump					1	
Burst compressed air pipe						
Fall of open light into powder can (black powder)						1
Premature ignition of explosive (black powder)						1
Struck by flying coal from shot (Monobel No. 1 black powder)						2
Ignition of gas by open light						2

LIGNITE.—Continued.

CAUSE.	ABOVE GROUND.			BELOW GROUND.		
	Fatal	Serious	Slight	Fatal	Serious	Slight
Fell on crowbar in entry					1	
Fell while carrying pipe					1	
Shaft sinking, fall of lagging						1
Moving railroad car		1				
Fall of scaffolding		1	2			
Machinery on screening plant		1				
Struck by steam locomotive	1					
Fell while riding horse		1				
Lever broke while raising building		1				
Crushed by cage for raising timber to tippie. Not employed		1				
Caught by crossover dump		1				
Repairing mine cars		1				
Caught by fan machinery		1				
Total	1	10	2	8	18	18

BITUMINOUS.

CAUSE.	ABOVE GROUND.			BELOW GROUND.		
	Fatal	Serious	Slight	Fatal	Serious	Slight
Rope Haulage, caught by cars while switching						1
Rope Haulage, struck by hoisting cable		1				2
Rope Haulage, crushed between runaway derailed car and timber				1		
Rope Haulage, crushed between runaway cars, broken rope						1
Slope Haulage, crushed by loaded cars, compressed air					1	
Compressed air locomotive haulage, caught between timbers and cars					2	1
Compressed air locomotive haulage, fell in front of moving car					1	
Fall of roof at face of entry						
Fall of coal at face of entry						
Fall of rock at entry face				1		
Fall of rock in entry					1	
Fall of coal and rock, repairing cave on entry				1		
Fall of rock timbering cave on slope					1	
Fall of rock down chute						
Fall of rock at face of room					2	1
Fall of cap rock displacement of McGinty post				1		
Fall of rock from roof pillar				1		
Fall of rock extracting pillars					1	
Fall of roof coal extracting pillars					1	
Fall of coal in pillars					4	
Fall of coal at face of room				1		
Fall of coal at face of room while setting timber					1	
Smothered by fall of coal in chute				1		
Fall of coal causing fall down chute					2	
Fall of coal at face after firing shot				1		
Roof caved in chute				1		
Asphyxiated when crosscut driven through						
Fell off scaffolding at room face						1
Struck by flying coal from shot (Monobel No. 1)						1
Struck by flying rock from shot (Monobel No. 1)						1
Caught between loaded cars while passing between		1				

BITUMINOUS.—Continued.

CAUSE.	ABOVE GROUND.			BELOW GROUND.		
	Fatal	Serious	Slight	Fatal	Serious	Slight
Crushed between cars while coupling		1			1	
Spragging railway cars			1			
Fall from cart		1				
Fall of coal from railway car			1			
Struck by piece of rock on tippie, eye injured			1			
Total		4	3	10	18	10

ANTHRACITE.

CAUSE.	ABOVE GROUND.			BELOW GROUND.		
	Fatal	Serious	Slight	Fatal	Serious	Slight
Compressed air locomotive haulage, run over by cars						
Fall of roof at face while setting timber				1	1	
Fall of rock in chute						1
Total				1	1	1

Table showing accidents during 1916 classified according to the mines in the LIGNITE field at which they occurred.

Name of Operator	District	ABOVE GROUND			BELOW GROUND				Total above & below ground
		Fatal	Serious	Slight	Total	Fatal	Serious	Slight	
Link Coal Co.	Pincher Creek					1			1
Can. Pac. Ry. No. 3 mine	Lethbridge		1		1		3	1	5
Can. Pac. Ry. No. 6 mine	Lethbridge			2	2	1		2	5
North American Collieries, Ltd., Coal-hurst	Lethbridge	1	1		2	4	4	1	11
Grace Coal Mine	Lethbridge							1	1
Canada West Coal Co., Ltd.	Taber						1		1
Premier Coal Co., Elean.	Taber						1		1
Drumheller Land Co., Ltd.	Drumheller						1		1
Western Commercial Co., Ltd.	Drumheller							1	1
Rosedale Coal & Clay Products Co., Ltd.	Drumheller		1		1			1	2
Red Deer Valley Coal Co., Ltd.	Drumheller							2	2
Rose-Deer Coal Mining Co., Ltd.	Drumheller		1		1			2	3
Sterling Coal Co., Ltd.	Drumheller					1			1
The Star Coal Mines, Ltd.	Drumheller						1	2	3
Midland Collieries, Ltd.	Drumheller								1
On unleased land									1
Consumers' Co-Operative Coal Co., Ltd.	Big Valley								1
Big Valley Collieries, Ltd.	Big Valley					1			1
A. D. McCormack	Lacombe		1		1		1		1
Battle River Collieries, Ltd.	Camrose								1
Spicer Coal Co., Ltd.	Camrose		1		1				1
Humberstone Coal Co.	Clover Bar		1		1				1
Dawson Coal Co., Ltd.	Edmonton							1	1
McPeak Coal Co.	Edmonton							2	2
Cardiff Collieries, Ltd.	Cardiff		2		2		3		5
Island Lake Coal Co., Ltd.	Wabamun							1	1
Pembina Coal Operators, Ltd.	Pembina						1		1
North American Collieries, Ltd.	Pembina		1		1				1
Total		1	10	2	13	8	18	18	57

Table showing accidents during 1916 classified according to the mines in the BITUMINOUS field at which they occurred.

Name of Operator	District	ABOVE GROUND				BELOW GROUND				Total above & below ground
		Fatal	Serious	Slight	Total	Fatal	Serious	Slight	Total	
Hillcrest Collieries, Ltd.	Crow's Nest Pass		1		1	3		2	5	6
International Coal & Coke Co., Ltd.	Crow's Nest Pass		1		1	1	2	1	4	5
Franco-Canadian Collieries, Ltd.	Crow's Nest Pass					1	1	3	5	5
West Canadian Collieries, Ltd., Greenhill				1	1		1	3	4	5
McGillivray Creek Coal & Coke Co., Ltd.	Crow's Nest Pass									1
West Canadian Collieries, Ltd., Bellevue	Crow's Nest Pass			1	1		3		3	4
Canmore Coal Co., Ltd.	Canmore						1	1	2	2
Georgetown Collieries, Ltd.	Canmore					1	1		2	2
Brazeau Collieries, Ltd.	Brazeau		1		1		2		4	5
The Saunders Creek Coal Co., Ltd.	Brazeau			1	1					1
Jasper Park Collieries, Ltd.	Jasper Park		1		1		3		4	5
Brule Lake Coal Co., Ltd.	Jasper Park					1	1		2	2
North American Collieries, Ltd., Lovett	Yellowhead Pass						1		1	1
Mountain Park Coal Co., Ltd.	Mountain Park							1	1	1
Total			4	3	7	10	18	10	38	45

Table showing accidents during 1916 classified according to the mines in the ANTHRACITE field at which they occurred.

Name of Operator	District	ABOVE GROUND				BELOW GROUND				Total above & below ground
		Fatal	Serious	Slight	Total	Fatal	Serious	Slight	Total	
Can. Pac. Ry. (Bankhead mine)	Banff					1	1	1	3	3
Total						1	1	1	3	3

Tabulated list of Accidents occurring in the Province above and below ground during the year 1916. Classified according to the Districts in which they occurred:

Name of District.	Fatal		Serious		Slight		Total		Total Above and Below Ground
	Above	Below	Above	Below	Above	Below	Above	Below	
Crow's Nest Pass		5	2	8	2	9	2	22	26
Pincher Creek		1						1	1
Lethbridge		5	2	7	2	5	5	17	22
Magrath									
Milk River				2					2
Taber									
Bow Island									
Medicine Hat									
Aldersyde									
High River		1		2		1		4	4
Canmore		1		1		1		3	3
Banff		2	2	3		8	2	13	15
Drumheller				1		1		2	2
Big Valley		2	1	2	1		2	4	6
Brazeau									
Brooks									
Hanna			1				1		1
Lacombe									
Trochu									
Three Hills									
Carbon									
Battle River			1	1			1	1	2
Camrose									
Tofield			1				1		1
Clover Bar						3		3	3
Edmonton									
Namoo			2	3			2	3	5
Cardiff						1		1	1
Wabamun			1				1		2
Penibina			1	1			1	1	2
Jasper Park			1	4			1	6	7
Yellowhead Pass		2		1				1	1
Mountain Park									
Peace River				1				1	1
Total	1	19	14	37	5	29	20	85	105

DEPARTMENT OF PUBLIC WORKS

Tabulated list of Accidents occurring in the Province above and below ground during the year 1916:

CAUSE	Fatal		Serious		Slight		Total	
	Above	Below	Above	Below	Above	Below	Above	Below
Haulage		7	2	9		9	2	25
Fall of coal		2		10		1		13
Fall of rock		5		12		8		25
Fall of cap-rock		1						1
Fall of rock and coal timbering cave		1		1				2
Falling down chute		1		2				3
Asphyxiated by gas		1						1
Ignition of gas by open light						3		3
Struck by flying coal from shot						3		3
Struck by flying rock from shot						1		1
Premature ignition of black powder						1		1
Open light falling in black powder						1		1
Fall of scaffolding					2	1	2	1
Drowned in sump		1						1
Bursting of compressed air pipe				1				1
Fell on crowbar				1				1
Fell while carrying pipe				1				1
Fall of lagging in sinking shaft						1		1
Moving railway cars			3		1		4	
Struck by locomotive and cars	1						1	
Crushed between mine cars			2				2	
Tipple machinery			1				1	
Crossover tipple dump			1				1	
Fell off horse			1				1	
Fan machinery			1				1	
Repairing mine cars			1				1	
Fall from cart			1				1	
Fall of coal from railway car					1		1	
Struck by piece of rock on tipple					1		1	
Crushed by timber cage (not employed)			1				1	
Total	1	19	14	37	5	29	20	85

LIST OF PROSECUTIONS UNDER THE MINES ACT DURING 1916.

Mine in Which Contravention was Committed	Description of Defendant	Offence Charged	Result of Proceedings	Penalty	Costs
North American Collieries, Ltd., Coalhurst	Examiner	Allowed another person to connect shot-firing cable. (Sec. 65, sub-sec. 7)	Convicted	None	\$9.25
West Canadian Collieries, Ltd., Bellevue	Overman	While travelling in mine with cracked lamp glass failed to extinguish light. (Sec. 113, sub-sec. 2)	Convicted	\$20.00	\$5.25
West Canadian Collieries, Ltd., Bellevue	Miner	Had two cigarettes in his possession. (Sec. 64, sub-sec. 3)	Convicted	\$10.00	\$5.00
Franco-Canadian Collieries, Ltd.	Miner	Had a match in his possession. (Sec. 64, sub-sec. 3)	Convicted	\$10.00	\$4.25
Midland Collieries, Ltd.	Miner	Had cigarette papers and tobacco. (Sec. 64, sub-sec. 3)	Convicted	\$5.00	\$2.00
Midland Collieries, Ltd.	Miner	Had pipe in his possession. (Sec. 64, sub-sec. 3)	Convicted	\$5.00	\$2.00
Midland Collieries, Ltd.	Miner	Had pipe and tobacco. (Sec. 64, sub-sec. 3)	Convicted	\$5.00	\$2.00
Midland Collieries, Ltd.	Miner	Had pipe, tobacco and matches. (Sec. 64, sub-sec. 3)	Convicted	\$5.00	\$2.00
Midland Collieries, Ltd.	Miner	Had match underground. (Sec. 64, sub-sec. 3)	Convicted	\$5.00	\$2.00
Midland Collieries, Ltd.	Miner	Had pipe and two matches. (Sec. 64, sub-sec. 3)	Convicted	\$5.00	\$2.00
Midland Collieries, Ltd.	Miner	Had four matches underground. (Sec. 64, sub-sec. 3)	Convicted	\$5.00	\$2.00

DEPARTMENT OF PUBLIC WORKS

LIST OF PROSECUTIONS UNDER THE MINES ACT DURING 1916.—Continued.

Mine in Which Contravention was Committed	Description of Defendant	Offence Charged	Result of Proceedings	Penalty	Costs
Can. Pac. Ry. No. 3 Mine.	Loader	Worked in excess of 8 hours. (Sec. 9)	Convicted	\$10.00	\$8.75
Can. Pac. Ry. No. 3 Mine.	Loader	ditto	Convicted	\$10.00	\$8.25
Can. Pac. Ry. No. 3 Mine.	Loader	ditto	Convicted	\$10.00	\$8.25
Can. Pac. Ry. No. 3 Mine.	Machine runner	ditto	Convicted	\$10.00	\$8.25
West Canadian Collieries, Ltd., Bellevue No. 2	Examiner	Fired shot in dry and dusty place. (Sec. 65, sub-sec. 12)	Dismissed		
Hillcrest Collieries, Ltd.	Mine manager	Failed to provide adequate amount of ventilation. (Sec. 58, sub-sec. 2)	Convicted	\$25.00	\$3.25
International Coal & Coke Co., Ltd.	Examiner	Failed to fence off unsafe place in mine. (Sec. 110, sub-sec. 2)	Convicted	\$10.00	\$3.25
Chinook Coal Co., Ltd.	Loader	Underground in excess of 8 hours for the purpose of his work. (Sec. 9)	Convicted	\$25.00	\$8.70
Brazeau Collieries, Ltd.	Miner	Having matches in his possession in the mine. (Sec. 64, sub-sec. 3)	Convicted	\$15.00	\$2.75
McGillivray Creek Coal & Coke Co., Ltd.	Miner	Failed to obey the lawful order of the person under whose charge he was working. (Sec. 94)	Convicted	\$25.00	\$6.25
West Canadian Collieries, Ltd., Blairmore	Miner	Failed to obey the lawful orders of the person under whose charge he was working. (Sec. 94)	Convicted	\$25.00	\$8.25
William Trentham	Miner	Failed to give notice of commencement of new mine. (Sec. 46)	Not convicted	Dismissed	
William Trentham	Miner	Operating mine without authorized certificated person in charge. (Sec. 29, sub-sec. 21)	Convicted	\$5.00	\$2.50
Canmore Coal Co., Ltd.	Miner's help	Having matches in his possession in mine. (Sec. 64, sub-sec. 3)	Convicted	\$20.00	\$9.00

LIST OF PROSECUTIONS UNDER THE MINES ACT DURING 1916.—Continued.

Mine in Which Contravention was Committed	Description of Defendant	Offence Charged	Result of Proceedings	Penalty	Costs
BrazEAU Collieries, Ltd.	Miner	Having matches in his possession in mine. (Sec. 64, sub-sec. 3)	Convicted	\$20.00	\$5.25
West Canadian Collieries, Ltd., Bellevue	Miner	Failed to set a sprag or have other support under coal while undermin- ing. (Sec. 75)	Convicted	\$20.00	\$5.25
Rose-Deer Coal Mining Co., Ltd.	Examiner	Failed to take proper precautions to see that all persons were out of dan- ger before firing shot. (Sec. 111, sub-sec. 2)	Convicted	\$25.00	\$2.25
McGillivray Creek Coal & Coke Co., Ltd., Carbondale mine	Miner	Failed to set timber to support over- hanging coal at the face of his work- ing place. (Sec. 114, sub-sec. 4)	Convicted	\$15.00	\$4.25
McGillivray Creek Coal & Coke Co., Ltd., Carbondale mine	Miner	Failed to set timber to support over- hanging coal at the face of his work- ing place. (Sec. 114, sub-sec. 4)	Convicted	\$15.00	\$4.25
McGillivray Creek Coal & Coke Co., Ltd., Coleman	Miner	Failed to set timber to support over- hanging coal at the face of his work- ing place. (Sec. 114, sub-sec. 4)	Convicted	\$15.00	\$5.25
McGillivray Creek Coal & Coke Co., Ltd., Coleman	Miner	Failed to set timber to support over- hanging coal at the face of his work- ing place. (Sec. 114, sub-sec. 4)	Convicted	\$15.00	\$5.25
Hillcrest Collieries, Ltd.	Miner	Failed to fence off his working place knowing there was gas at the face thereof. (Sec. 114, sub-sec. 4)	Convicted	\$10.00	\$3.75

LIST OF PROSECUTIONS UNDER THE MINES ACT DURING 1916.—*Continued.*

Mine in Which Contravention was Committed	Description of Defendant	Offence Charged	Result of Proceedings	Penalty	Costs
Hillcrest Collieries, Ltd.	Miner	Failed to fence off his working place, knowing there was gas at the face thereof. (Sec. 114, sub-sec. 4)	Convicted	\$10.00	\$2.75
Hillcrest Collieries, Ltd.	Miner	Allowed a car to remain under bratticing at the bottom of his working place, causing the air to short circuit and gas to accumulate at the face of room. (Sec. 97)	Convicted	\$10.00	\$1.75
Hillcrest Collieries, Ltd.	Miner	Allowed a car to remain under bratticing at the bottom of his working place, causing the air to short circuit and gas to accumulate at the face of room. (Sec. 97)	Convicted	\$10.00	\$3.75
Midland Collieries, Ltd.	Miner	Refused to obey orders by walking up hoisting slope without permission. (Sec. 94)	Convicted	\$15.00	\$4.55
Midland Collieries, Ltd.	Miner	Refused to obey orders by walking up hoisting slope without permission. (Sec. 94)	Convicted	\$15.00	\$4.85



FIRST FULLY TRAINED MINE RESCUE TEAM IN ALBERTA.



MINE RESCUE CAR No. 1.



INTERIOR OF MINE RESCUE STATION, LETHBRIDGE.



INTERIOR OF MINE RESCUE STATION, LETHBRIDGE.

MINE RESCUE AND FIRST AID.

Arrangements have been made for the installation of a car in the Drumheller field. This car, which has been obtained from the Canadian Northern Railway Company, was put into operation on January 1st, 1917. It is also intended to install a station at Mountain Park during the present year.

Stations are in operation at the mines operated by the Canadian Pacific Railway Company at Lethbridge, the North American Collieries, Ltd., at Coalhurst, the Jasper Park Collieries, Ltd., at Poca-hontas, and the Brazeau Collieries, Ltd., at Nordegg. A sub-station is also in operation at the mine operated by the Chinook Coal Co., Ltd., at Commerce; the apparatus being taken to this station from the Coalhurst station when required for training purposes.

Car No. 1 visits all the mines in the Crow's Nest Pass District between Coleman and Bellevue; Car No. 2, the mines at Bankhead and Canmore; and Car No. 3 will visit all the mines in the Drumheller District between Wayne and Big Valley.

Car No. 1 is under the charge of Mr. Henry James, and Car No. 2, Mr. William B. Powell. The Lethbridge and Coalhurst stations are under the charge of Mr. Alexander MacAskill, the Jasper Park station, Mr. Thomas J. Shaw, and the Nordegg station, Mr. James M. Stewart.

The superintendents in charge of the cars and the Lethbridge stations devote their whole time to instruction in First Aid and Mine Rescue Work, while the superintendents at the other stations are employed at the mines where the stations are situated and devote whatever portion of their time is necessary to this work.

Mr. A. MacAskill is a returned soldier, and it is intended that when consistent with efficiency returned soldiers will be appointed in future as Superintendents of the Mine Rescue Stations and Cars.

The cars are fully equipped for mine rescue work and are divided into lecture-room, office, kitchen with full supply of cooking utensils, and toilet. Provision is also made for sleeping accommodation for persons engaged in mine rescue work. The cars can either be heated by a heater installed in the car or by steam supplied from the mine at which it is stationed.

The Lethbridge station is equipped as follows:

- 10 sets of breathing apparatus.
- 1 compression pump of the Draeger type.
- 1 pulmotor.
- 1 lungmotor.
- 1 inhalation apparatus.
- 1 animal air tester.
- 1 meter for testing reducing valves.
- 11 oxygen cylinders of 100 cub. ft. capacity
- 5 smoke helmets.
- 1 first aid cabinet.
- 2 stretchers.
- 975 lbs. stick caustic soda.
- 3940 lbs. lump caustic soda.

The Coalhurst station is equipped as follows:

- 5 sets of breathing apparatus.
- 1 compression pump of the Proto type.
- 1 pulmotor.

- 1 rectifier for re-charging mine lamps.
- 9 oxygen cylinders of 100 cub. ft. capacity.
- 1 stretcher.
- 1184 lbs. lump caustic soda.
- 1416 lbs. stick caustic soda.

The Jasper Park station is equipped as follows:

- 6 sets of breathing apparatus.
- 1 compression pump of the Draeger type.
- 1 pulmotor.
- 1 inhalation apparatus.
- 1 rectifier for re-charging mine lamps.
- 12 electric head lamps of the Edison type.
- 10 oxygen storage cylinders of 100 cub. ft. capacity.
- 1 animal air tester.
- 1 meter for testing air valves.
- 3 smoke helmets.
- 1 stretcher.
- 656 lbs. stick caustic soda.
- 2614 lbs. lump caustic soda.

The Brazeau station is equipped as follows:

- 5 sets of breathing apparatus.
- 1 compression pump of the Proto type.
- 9 oxygen storage cylinders of 100 cub. ft. capacity.
- 1 pulmotor.
- 1 stretcher.
- 1 animal air tester.
- 1 meter for testing reducing valves.
- 3 smoke helmets.
- 6 electric hand lamps.
- 700 lbs. stick caustic soda.
- 2278 lbs. lump caustic soda.

Car No. 1 is equipped as follows:

- 10 sets of breathing apparatus.
- 1 compression pump of the Proto type.
- 1 pulmotor.
- 1 inhalation apparatus.
- 1 animal air tester.
- 12 electric hand lamps.
- 2 stretchers.
- 1 meter for testing reducing valves.
- 1 first aid cabinet.
- 12 oxygen storage cylinders of 100 cub. ft. capacity.
- 2 oxygen storage cylinders of 150 cub. ft. capacity.
- 972 lbs. stick caustic soda.
- 2718 lbs. lump caustic soda.

Car No. 2 is equipped as follows:

- 10 sets of breathing apparatus.
- 1 pulmotor.
- 1 inhalation apparatus.
- 1 compression pump of the Proto type.
- 10 oxygen storage cylinders of 150 cub. ft. capacity.
- 1 animal air tester.
- 1 meter for testing reducing valves.
- 12 electric head lamps of the Wico type.
- 6 smoke helmets.
- 1 first aid cabinet.
- 2 stretchers.
- 1 canvas tent 12 ft. x 14 ft.
- 940 lbs. stick caustic soda.
- 2030 lbs. lump caustic soda.

Sufficient spare parts are also kept at each station so that repairs can be made promptly should any portion of the apparatus become defective at any time.

Provision is also made at each station for re-charging the portable electric lamps by the electric plant at the mine at which the station is situated. An electric generating plant operated by a gasoline engine is placed in each car so that the portable lamps on the car can be charged without having to be removed. This arrangement is working very satisfactorily. All the apparatus used are of the Proto type and capable of being used continuously for at least two hours. All one hour types of apparatus have been discarded as they have proved to be of no practical value. All the electric hand lamps at present in use at the stations or cars are of the Proto type. These lamps are, however, being replaced as rapidly as possible by head lights of the Edison type. It has been found that head lights are much more suitable than hand lamps, as by using them a person wearing the apparatus has full use of both hands. At the Lethbridge and Coalhurst stations the electric lamps which are used by the miners at these mines are used also by the men being trained in the use of the apparatus.

Although a large number of men have enlisted for overseas service, the training in First Aid and Mine Rescue Work has been carried on in a fairly satisfactory manner.

Several classes for the purpose of giving instruction in First Aid have been carried on satisfactorily at different mines throughout the year, a large percentage of those who attended these classes having been successful in obtaining First Aid Certificates from the St. John's Ambulance Association.

The schedule of training at the stations and cars is as follows:

FIRST DAY.

Explanation of the apparatus by the superintendent and demonstration with the pulmotor, lungmotor, inhalation apparatus, compression pump and animal air tester.

SECOND DAY.

Each member of the team takes apart and assembles the apparatus, repeating the same until all are fully familiar with each part. Each member of the team demonstrates the application of the pulmotor, lungmotor and inhalation apparatus.

THIRD DAY.

Each member of the team wears apparatus for two hours in fresh air while walking a distance of one mile.

FOURTH DAY.

Each member of the team wears apparatus one hour in fresh air and one hour in smoke room in a vitiated atmosphere, making five trips through a tunnel 35 feet in length by 18 inches in height by 24 inches in width.

FIFTH DAY.

Each member of the team wears apparatus for two hours in smoke room in a vitiated atmosphere and builds a brick stopping 6 ft. by 6 ft.

SIXTH DAY.

The members of the team wear the apparatus two hours in smoke room in a vitiated atmosphere and build a brick stopping 6 ft. by 6 ft., after which they make ten trips through the tunnel and move 1,000 lbs. of rock a distance of thirty feet.

SEVENTH DAY.

Team makes trip underground, travelling a distance of two miles while carrying a stretcher.

EIGHTH DAY.

The work done on seventh day is repeated.

NINTH DAY.

The work done on sixth day is repeated.

TENTH DAY.

Team wears apparatus for two hours and transports a weight of 180 lbs. on a stretcher up an incline one in seven and 1,000 yards in length, then proceeds into a vitiated atmosphere in the smoke room and builds a brick stopping 6 ft. by 6 ft. with a regulator 24 in. by 24 in., through which a man is carried on a stretcher.

At the end of each training, each member is required to thoroughly clean the apparatus he has been using and recharge it, leaving it ready for use.

The complete training lasts ten days of two hours each. Six months after this course is completed, the person trained is required to present himself for another day's training, after which, if he is found to be satisfactory, a certificate is awarded to him.

No calls have been made during the year for the apparatus, although on five different occasions requests have been made for the use of the pulmotor and inhalation apparatus, not only for use on mine employees, but also on others.

In two cases the pulmotor was applied, and in two other cases the inhalation apparatus was applied to children suffering from pneumonia. Of the four children treated in this manner two recovered. The pulmotor was applied in the case of a miner, who was asphyxiated underground at Coleman, but with unsuccessful results.

The following table gives particulars as to the number of persons trained in First Aid and Mine Rescue Work at different mines in the province:

NAME OF MINE	No. of Persons trained previous to 1916 in		No. of Persons trained during 1916 in	
	Mine Rescue	First Aid	Mine Rescue	First Aid
C. P. R. No. 6 mine	65	65	30	15
C. P. R. No. 3 mine	20	25	15	5
North American Collieries, Ltd., Coal-hurst	45	40	18	20
Chinook Coal Co., Commerce	20	25	.....	.....
Canada West Coal Co., Ltd., Taber....	40	40	.....	.....
Rock Springs Coal & Coke Co., Taber..	15	10	.....	.....
West Canadian Collieries, Ltd., Blairmore	23	10	5	.....
West Canadian Collieries, Ltd., Bellevue	40	20	9	10
McGillivray Creek Coal & Coke Co., Ltd., Coleman	15	15	6	5
International Coal & Coke Co., Ltd., Coleman	25	40	6	10
Leitch Collieries, Ltd., Passburg.....	10	10	.....	.....
Hillcrest Collieries, Ltd.	15	5	6	.....
Franco-Canadian Collieries, Ltd., Frank	10	.....	5	.....
Burmis Coal Co., Ltd.	10	5	.....	.....
Maple Leaf Coal Co., Ltd., Bellevue....	5	5	.....	.....
Brazeau Collieries, Ltd., Nordegg	25	20	20	.....
Canmore Coal Co., Canmore	25	12	15	.....
Georgetown Collieries, Ltd.	10	.....	3	.....
C. P. R., Bankhead	20	10	10	.....
Jasper Park Collieries, Ltd., Pocahontas	20	20	20	.....
Total	458	357	168	65

The above table includes those who have been trained in Mine Rescue Work and First Aid in the Province, but does not include those who may have been trained elsewhere.

It will be noted from this table that 626 men have undergone training with the apparatus. Of these 261 have been granted certificates of efficiency.

Successful contests in Mine Rescue and First Aid Work were held at Coleman on July 1st, 1916, at which it is estimated over 5,000 persons were present.

Teams from the following mines took part in the Mine Rescue Competition: one team from the No. 3 Mine and one team from the No. 6 Mine of the Canadian Pacific Railway Company, Lethbridge, one from the International Coal & Coke Co., Ltd., Coleman, one from the McGillivray Creek Coal & Coke Co., Ltd., Coleman, two from the Coal Creek Mine and two from the Michel Mine of the Crow's Nest Coal & Coke Co., Ltd., British Columbia.

The successful teams in the above competition were:

First, Coal Creek.

Second, No. 6 Mine, Lethbridge.

Third, No. 3 Mine, Lethbridge.

Teams from the following mines took part in the First Aid Competition: one from No. 6 Mine, Lethbridge, one from Michel, two

from Coal Creek, one from the mine operated by the McGillivray Creek Coal & Coke Co., Ltd., and two from the International Coal & Coke Co., Ltd.

The successful teams in the above competition were:

First, International Coal & Coke Co., Ltd.

Second, McGillivray Creek Coal & Coke Co., Ltd.

Third, International Coal & Coke Co., Ltd.

The first prizes in each competition were a silver shield and five gold medals awarded by the Rocky Mountain Branch of the Canadian Mining Institute. The second prizes were five gold fobs awarded by District 18 of the United Mine Workers of America, and the third prizes five silver medals awarded by the Rocky Mountain Branch.

On representations being made by the Rocky Mountain Branch of the Canadian Mining Institute, arrangements were made for the payment of the members of teams for the time during which they were engaged in training.

This payment is at the rate of 50 cents per hour and is made by the Provincial Government after receipt of a time sheet from the superintendent of each station. Two teams are selected from each mine and each member of these teams is expected to present himself for a training of three hours at least once during each month. Each team is composed of five men, one of whom is appointed captain. Before any person is allowed to commence training in the use of the apparatus he is required to undergo a very strict medical examination.

This arrangement was put into effect on November 1st, 1916, and appears to be giving very satisfactory results.

The Canadian Mining Institute has installed at each station and car a branch library and provides the following publications: Coal Age, Colliery Engineer, Science and Art of Mining and the Colliery Guardian, to which all mine employees and mining students have access.

All expense and salaries in connection with the equipment and operation of the stations and cars are paid by the Provincial Government, the mine operators being assessed one-half of the cost at the end of each calendar year.

This arrangement was put into effect when the Mine Rescue Work was commenced in the Province and has been satisfactory.

List of Names of Holders of Mine Rescue Certificates Issued by the
Government of the Province of Alberta.

NAME.	ADDRESS	CERT. NO.	DATE ISSUED
Allen, William C.	Coleman	2	8-11-13
Aspinall, Francis	Calgary	8	24-11-13
Allen, Peter	Coleman	61	4- 5-14
Adams, Thomas H.	Frank	99	28- 5-14
▲shman, Alfred W.	Lovett	147	25- 2-15
Adlam, William	Hillcrest	171	21- 5-15
Anderson, Thomas	Taber	199	14- 8-15
Appleton, John	Taber	203	7- 9-15
Adams, William A.	Coalhurst	258	13-12-16
Buck, John	Lethbridge	16	1-12-13
Baird, Thomas	Lethbridge	30	22-12-13
Beres, Alexander	Lethbridge	39	23-12-13
Blasco, Frank	Lethbridge	40	23-12-13
Bryan, John	Coleman	54	7- 4-14
Bobinex, John	Lethbridge	58	7- 4-14
Brearley, Garnet	Lethbridge	69	4- 5-14
Brisovi, David	Lethbridge	82	13- 5-14
Bedwell, Alfred	Coalhurst	95	21- 5-14
Berford, Edward	Lethbridge	101	28- 5-14
Bainbridge, James	Coalhurst	111	15- 6-14
Bateman, Joseph William	Coleman	121	22- 8-14
Barrie, George	Commerce	152	4- 5-15
Briscoe, Daniel	Hillcrest	169	21- 5-15
Bland, Harry O.	Taber	182	29- 6-15
Byers, John W.	Taber	184	29- 6-15
Bateman, James	Taber	189	29- 6-15
Bateman, Edward	Taber	190	29- 6-15
Bruno, George	Coleman	224	21-12-15
Burns, Tom Tiffin	Coleman	252	30- 8-16
Brown, John F.	Pocahontas	248	1- 8-16
Biose, A.	Coalhurst	259	13-12-16
Coutts, George	Lethbridge	12	1-12-13
Clark, Robert	Lethbridge	19	1-12-13
Crawford, William	Lethbridge	24	22-12-13
Coutts, David	Lethbridge	27	22-12-13
Chaplow, Joseph	Lethbridge	41	23-12-13
Carter, Benjamin	Coalhurst	79	4- 5-14
Campbell, Archibald	Lethbridge	83	13- 5-14
Connors, Robert	Coalhurst	107	15- 6-14
Cox, John	Coleman	126	22- 8-14
Coupland, Edward	Bellevue	130	8-10-14
Chapman, Thomas	Hardieville	156	4- 5-15
Crabb, Samuel A. B.	Hardieville	175	1- 6-15
Crockett, Levi	Frank	209	19-10-15
Callander, Ira C.	Pocahontas	217	26-11-15
Cox, William Henry	Coleman	223	21-12-15
Chesney, Samuel	Pocahontas	251	8- 8-16
Davis, David	Coleman	5	8-11-13
Draper, Robert	Lethbridge	25	22-12-13
Devoy, William	Lethbridge	68	4- 5-14
Davey, George	Coalhurst	109	15- 6-14
Dewar, Alex.	Coleman	137	3-11-14
Davidson, David	Bellevue	142	3-11-14
Dancosine, Robert	Commerce	154	4- 5-15
Davies, Thomas	Frank	207	19-10-15
DeHart, Joseph B.	Coalhurst	215	18-11-15
Dow, Andrew G.	Coleman	228	31-12-15
Donaldson, C. S.	Lethbridge	241	20- 5-16
Davidson, William A.	Coleman	245	14- 7-16
Davis, Thomas O.	Pocahontas	255	28-11-16

List of Names of Holders of Mine Rescue Certificates Issued by the Government of the Province of Alberta.—*Continued.*

NAME.	ADDRESS	CERT. NO.	DATE ISSUED
Evans, Hugh	Coalhurst	93	21- 5-14
Evans, Nathaniel	Passburg	145	22-12-14
Evans, Hopkin	Taber	192	29- 6-15
Formos, George	Lethbridge	86	13- 5-14
Ferguson, John	Commerce	160	4- 5-15
Fyfe, Walter H.	Hardieville	172	1- 6-15
Fenton, Leslie	Taber	178	29- 6-15
Fernes, Joseph	Taber	198	14- 8-15
Finlayson, James B.	Frank	210	19-10-15
Frazer, James	Coleman	227	31-12-15
Fisher, James	Bellevue	260	21-12-16
Goldie, George	Lethbridge	31	22-12-13
Goldie, William	Lethbridge	32	22-12-13
Grant, Robert	Lethbridge	34	22-12-13
Grisak, John	Lethbridge	35	22-12-13
Gallagher, Michael	Lethbridge	46	23-12-13
Gate, Henry	Passburg	64	4- 5-14
Grant, John	Lethbridge	66	4- 5-14
Greenhalgh, R. M.	Coleman	144	22-12-14
Garrett, John	Blairmore	150	4- 5-15
Grant, Robert H.	Hardieville	158	4- 5-15
Gwilliam, David J. M.	Pocahontas	249	1- 8-16
Gwedrick, W. L.	Commerce	167	4- 5-15
Hargreaves, George	Lethbridge	26	22-12-13
Hunter, Alex. Burton	Coleman	59	4- 5-14
Harries, Harry Cecil	Coleman	63	4- 5-14
Holme, Charles	Commerce	75	4- 5-14
Hackman, Thomas	Lethbridge	102	28- 5-14
Hutchison, Peter	Commerce	104	28- 5-14
Hill, James	Coalhurst	105	28- 5-14
Hopkins, William George	Coleman	119	22- 8-14
Hilling, James	Coleman	124	22- 8-14
Hyslop, David	Coleman	125	22- 8-14
Hutton, David T.	Bellevue	131	8-10-14
Hallworth, Albert	Bellevue	140	3-11-14
Howell, Nathaniel	Passburg	146	22-12-14
Huntrods, E. S. F.	Taber	193	29- 6-15
Heap, Robert	Coalhurst	194	14- 8-15
Hynd, William	Elcan	204	7- 9-15
Hutton, Hugh	Bellevue	230	1- 5-16
Hamilton, John	Lethbridge	234	13- 4-16
Horne, Robert	Lethbridge	235	9- 5-16
Howells, John	Elcan	240	20- 5-16
Ironmonger, John	Hillcrest	170	20- 5-15
Ivory, James	Taber	200	7- 9-15
Jones, Samuel A.	Lethbridge	9	30-11-13
James, Henry	Coleman	92	21- 5-14
Jackson, John	Bellevue	133	8-10-14
Jones, Peter	Commerce	164	1- 5-15
Jordon, William	Taber	179	29- 6-15
Johnson, Moses	Taber	180	29- 6-15
Jones, David	Taber	196	14- 8-15
Johnson, Benjamin	Elcan	201	7- 9-15
Johnson, Albert	Coleman	222	21-12-15
James, I. A.	Coleman	226	31-12-15
Johnson, George	Coalhurst	239	20- 5-16

List of Names of Holders of Mine Rescue Certificates Issued by the
Government of the Province of Alberta.—*Continued.*

NAME.	ADDRESS	CERT. NO.	DATE ISSUED
Kellock, George	Coleman	3	8-11-13
Kellett, Walton	Lethbridge	23	1-12-13
Kelly, Patrick	Coalhurst	106	28- 5-14
Keith, John D.	Coalhurst	115	17- 6-14
Keith, Sylvanus	Coalhurst	214	18-11-15
Keubenic, Joseph	Coleman	219	26-11-15
Kerr, Robert	Canmore	221	21-12-15
Knox, Joseph	Hardieville	233	13- 4-16
Livingstone, Robert	Lethbridge	10	30-11-13
Livingstone, John	Lethbridge	22	1-12-13
Larson, John	Lethbridge	47	23-12-13
Larrigan, James	Coleman	148	25- 2-15
Lewis, Thomas	Hardieville	174	1- 6-15
Longdon, Herbert	Taber	183	29- 6-15
Lee, Robert J.	Elcan	187	29- 6-15
Lindsay, John	Coalhurst	212	18-11-15
Leoski, Stephen	Coleman	218	26-11-15
Morrison, Malcolm	Coleman	4	8-11-13
Millar, Joseph	Lethbridge	20	1-12-13
Makeranko, Stephen A.	Lethbridge	36	22-12-13
Muir, Alexander	Lethbridge	38	22-12-13
Moore, James	Lethbridge	43	23-12-13
Millar, Andrew A.	Blairmore	50	23-12-13
Moore, Lewis	Lethbridge	67	4- 5-14
Metelskey, Fred	Coalhurst	71	4- 5-14
Main, David	Lethbridge	84	13- 5-14
Morgan, Manuel E.	Coalhurst	98	21- 5-14
Melling, Peter	Coalhurst	100	28- 5-14
Morley, Samson	Coalhurst	110	15- 6-14
Maxwell, William	Coalhurst	116	17- 6-14
Mason, Samuel	Blairmore	138	3-11-14
Morgan, Owen	Blairmore	151	4- 5-15
Millar, David L.	Hardieville	157	4- 5-15
Murray, John	Commerce	162	4- 5-15
Marsh, Ernest	Taber	191	29- 6-15
Myers, S.	Coleman	220	26-11-15
Makein, William John	Coleman	232	8- 4-16
Martin, Richard	Taber	242	20- 5-16
Mallabone, Ernest W.	Canmore	243	29- 5-16
Morgan, Robert	Coleman	253	30- 8-16
Macauley, Donald A.	Coleman	7	8-11-13
McGowan, James	Lethbridge	15	1-12-13
McDonald, Duncan	Lethbridge	51	23-12-13
McAuley, Angus Gillis	Coleman	60	4- 5-14
McCully, Joseph	Lethbridge	65	4- 5-14
McDonald, Wm. C.	Coalhurst	80	4- 5-14
MacMillan, Donald	Bellevue	123	22- 8-14
McMillan, William	Lethbridge	89	13- 5-14
McDonald, Noble Moore	Bellevue	127	8-10-14
McDonald, Hector S.	Bellevue	128	8-10-14
McGough, Joseph	Bellevue	129	8-10-14
McVey, William	Blairmore	139	3-11-14
MacDonald, J. O. C.	Coleman	149	18- 3-15
McMahon, William	Taber	181	29- 6-15
McMahon, James	Taber	186	29- 6-15
McMahon, George	Taber	188	29- 6-15
McLeod, J. B.	Pocahontas	246	1- 8-16

List of Names of Holders of Mine Rescue Certificates Issued by the Government of the Province of Alberta.—*Continued.*

NAME.	ADDRESS	CERT. NO.	DATE ISSUED
Nicol, James	Frank	211	19-10-15
Nugent, Bernard	Elcan	237	20- 5-16
Nicol, George	Pocahontas	250	8- 8-16
Ontko, Joseph	Lethbridge	29	22-12-13
O'Donnell, Thomas	Coalhurst	57	7- 4-14
Park, William	Lethbridge	18	1-12-13
Park, Alex. C.	Lethbridge	44	23-12-13
Powell, William B.	Canmore	49	23-12-13
Pinchek, Steve	Lethbridge	53	7- 4-14
Parry, Thomas	Coleman	62	4- 5-14
Peacock, Charles	Commerce	72	4- 5-14
Parks, John T.	Lethbridge	85	13- 5-14
Pelchek, Frank	Lethbridge	88	13- 5-14
Pearson, Thomas	Coalhurst	112	17- 6-14
Pitcher, Norman C.	Coalhurst	114	17- 6-14
Purdy, Sterns Johnson	Bellevue	141	3-11-14
Picton, William	Passburg	143	22-12-14
Petros, Matt.	Lethbridge	70	4- 5-14
Phillips, David	Commerce	155	4- 5-15
Pavier, Evan	Coleman	236	10- 5-16
Purvis, Sylvanus W.	Coalhurst	213	18-11-15
Puckett, Owen L.	Coalhurst	257	13-12-16
Queen, Andrew	Lethbridge	90	13- 5-14
Quigley, Daniel	Coalhurst	96	21- 5-14
Raber, Mike	Lethbridge	17	1-12-13
Ramsey, Peter M.	Lethbridge	28	22-12-13
Rereden, Robt.	Lethbridge	87	13- 5-14
Rae, John	Lethbridge	103	28- 5-14
Richardson, Matthew	Coalhurst	113	17- 6-14
Russell, James	Lethbridge	118	1- 8-14
Radford, James	Bellevue	132	8-10-14
Roberts, Ebenezer	Bellevue	134	8-10-14
Roberts, John	Bellevue	135	8-10-14
Reid, Adam H.	Commerce	163	4- 5-15
Richards, Charles C.	Commerce	165	4- 5-15
Reid, John C.	Commerce	166	4- 5-15
Rose, Walter	Hillcrest	168	21- 5-15
Royle, Edward	Hillcrest	205	19-10-15
Raynor, Fred	Bellevue	206	19-10-15
Reid, James	Frank	208	19-10-15
Rees, Daniel	Frank	256	28-11-16
Richards, Samuel	Hillcrest	261	21-12-16
Stevenson, John	Lethbridge	11	1-12-13
Stevenson, Alex.	Lethbridge	21	1-12-13
Steel, John W.	Lethbridge	33	22-12-13
Stevenson, John A.	Lethbridge	37	22-12-13
Seaman, John	Lethbridge	42	23-12-13
Stanco, Mike	Lethbridge	52	7- 4-14
Scott, John	Coalhurst	74	4- 5-14
Stobbs, Joseph	Coalhurst	76	4- 5-14
Sprout, Anthony	Coalhurst	78	4- 5-14
Soupok, John	Coalhurst	94	21- 5-14
Scott, Alex.	Coleman	122	22- 8-14
Scott, John	Commerce	159	4- 5-15
Stewart, James	Hardieville	173	1- 6-15
Shaw, Elia	Coalhurst	176	25- 5-15
Sevier, Reginald	Taber	177	29- 6-15
Sowerby, William N.	Taber	197	14- 8-15

List of Names of Holders of Mine Rescue Certificates Issued by the
Government of the Province of Alberta.—*Continued.*

NAME.	ADDRESS	CERT. NO.	DATE ISSUED
Scott, Andrew N.	Pocahontas	216	26-11-15
Stewart, James M.	Nordegg	225	21-12-15
Smith, John	Blairmore	231	7- 1-16
Shaw, Thomas	Pocahontas	247	7- 8-16
Thompson, Joseph	Coleman	1	8-11-13
Taylor, George W.	Lethbridge	45	23-12-13
Troman, Samuel	Lethbridge	48	23-12-13
Teasdale, Thomas	Lethbridge	81	13- 5-14
Thomas, Isaac	Coleman	91	21- 5-14
Tennant, Robert	Hardieville	202	7- 9-15
Thompson, Thomas	Coleman	229	31-12-15
Thom, George	Pocahontas	254	28-11-16
Vaselenak, Mike	Lethbridge	14	1-12-13
Vair, Walter	Coalhurst	77	4- 5-14
Watson, William	Coleman	6	8-11-13
Walton, Joseph	Lethbridge	13	1-12-13
Whittall, Richard	Lethbridge	55	7- 4-14
Worthington, Thomas	Lethbridge	56	7- 4-14
Williams, Eben	Coalhurst	73	4- 5-14
Walker, James	Coalhurst	97	21- 5-14
Whitefield, Isaac	Coalhurst	108	15- 6-14
Walker, Charles	Lethbridge	117	1- 8-14
White, William	Coleman	120	22- 8-14
Williams, John T.	Bellevue	136	8-10-14
Wyle, Robert	Commerce	153	4- 5-15
Watkins, James M.	Taber	238	20- 5-16
Wallwork, William	Taber	244	23- 6-16
Young, Ernest	Commerce	161	4- 5-15
Young, Thomas	Taber	185	29- 6-15
Young, James	Taber	195	14- 8-15

ANALYSES OF COAL.

During the last few years, mine and commercial samples of coal have been collected by the District Inspectors of Mines and forwarded to the Fuel-Testing Station at Ottawa. Commercial samples were sent in car-load lots and mine samples in sealed jars. The following table gives particulars of the reports of analyses obtained from these samples, the results referring to the fuel as it was received at Ottawa.

Date on Which Sample Was Taken	Name of Persons Taking Sample	Kind of Sample	Location of Mine from which samples were taken				Proximate Analysis				Calorific Value in B. T. Units	Remarks
			Sec.	Tp.	Rq.	W. of M.	Moisture	Ash	Volatile Matter	Fixed Carbon		
31-7-12	J. G. S. Hudson	Mine	28	52	24	4	20.8	24.5	24.1	30.6	6530	Machine cuttings.
31-7-12	J. G. S. Hudson	Mine	28	52	24	4	23.1	6.2	30.3	40.4	8770	Section of seam.
31-7-12	J. G. S. Hudson	Mine	28	52	24	4	24.5	12.2	26.8	36.5	7660	Full section of seam.
31-7-12	J. G. S. Hudson	Mine	28	52	24	4	23.8	6.	29.2	41.	8670	Face of main east.
31-7-12	J. G. S. Hudson	Mine	28	52	24	4	23.5	3.8	30.	42.7	9250	Face of 6th south.
7-8-12	J. G. S. Hudson	Mine	26	50	19	4	23.2	5.1	31.3	40.4	8950	Full section of seam.
7-8-12	J. G. S. Hudson	Mine	26	50	19	4	16.5	6.5	34.7	42.3	9220	Full section of seam.
7-8-12	J. G. S. Hudson	Mine	26	50	19	4	26.3	5.	30.4	38.3	8580	Taken from upper 4 ft. seam.
7-8-12	J. G. S. Hudson	Mine	26	50	19	4	27.4	6.3	28.2	38.1	8140	Taken from lower 4 ft. seam.
7-8-12	J. G. S. Hudson	Mine	26	50	19	4	21.1	10.8	30.	38.1	8170	Slack 2 years exposed to air.
7-8-12	J. G. S. Hudson	Mine	35	50	19	4	22.2	6.2	29.9	41.7	8740	Taken from water well.
7-8-12	J. G. S. Hudson	Mine	14	53	6	5	9.9	6.	34.8	49.3	10220	Full section face main entry.
10-8-12	J. G. S. Hudson	Mine	14	53	6	5	19.9	5.8	30.	44.3	9230	Full section of seam.
14-8-12	J. G. S. Hudson	Mine	24	55	25	4	26.1	4.8	28.9	40.2	8460	Main south-west entry.
14-8-12	J. G. S. Hudson	Mine	24	55	25	4	24.8	6.3	29.6	39.3	.....	South-west butt entry.
14-8-12	J. G. S. Hudson	Mine	24	55	25	4	27.4	3.4	29.	40.2	8280	Machine cuttings N.E. entry.
14-8-12	J. G. S. Hudson	Mine	24	55	25	4	26.2	6.	30.	37.8	8370	Full height of seam. N.W. entry.
14-8-12	J. G. S. Hudson	Mine	24	55	25	4	13.6	5.8	35.4	45.2	9540	Exposed to air for 8 months.
22-8-12	J. G. S. Hudson	Mine	14	53	4	5	18.9	5.6	31.6	43.9	8930	
22-8-12	J. G. S. Hudson	Mine	14	53	4	5	14.6	5.6	33.3	46.5	9450	
1-12-13	J. T. Stirling	Mine	6	25	11	5	0.8	9.6	16.8	72.8	13640	
4-12-13	J. T. Stirling	Mine	30	53	7	5	18.9	10.1	27.1	43.9	8870	Sample from No. 2 seam.

Date on Which Sample Was Taken	Name of Persons Taking Sample	Kind of Sample	Location of Mine from which samples were taken				Proximate Analysis				Calorific Value in B. T. Units	Remarks
			Sec.	Tr.	R. g.	W. of M.	Moisture	Ash	Volatile Matter	Fixed Carbon		
27-11-13	F. Aspinall	Mine	29	24	10	5	0.9	5.4	14.0	79.7	14470	No. 2 mine, Carey seam.
4-12-13	S. A. Jones	Mine	12	10	22	4	9.6	9.8	32.8	47.8	10640	
1-12-13	A. N. Scott	Mine	15	7	3	5	1.1	20.3	25.8	52.8	11670	Main gangway No. 1.
5-12-13	A. N. Scott & S. A. Jones	Mine	6	9	21	4	9.8	9.6	33.4	47.2	10880	No. 6 mine.
1-11-13	J. T. Stirling	Mine	2	29	20	4	19.2	6.4	30.3	44.1	9440	Lower seam.
24-1-14	S. A. Jones	Mine	21	9	22	4	8.9	9.7	33.6	47.8	10890	
26-1-14	A. N. Scott	Mine	29	7	3	5	1.3	17.0	20.8	60.9	12070	No. 1 seam, 61 tunnel.
18-4-14	S. A. Jones	Mine	31	9	16	4	13.0	10.8	30.9	45.3	9830	
18-4-14	A. N. Scott	Mine	36	7	4	5	1.2	16.5	26.0	56.3	12330	Shaft seam.
27-10-14	S. A. Jones	Mine	8	10	16	4	15.0	7.3	31.4	46.3	10100	
27-10-14	S. A. Jones	Mine	3	10	17	4	12.8	11.2	30.0	46.0	9580	
28-10-14	S. A. Jones	Mine	18	10	16	4	14.9	6.9	31.8	46.4	10050	
25-11-14	F. Aspinall	Mine	36	7	4	5	1.3	10.7	28.4	59.6	13240	South gangway No. 1
11-12-14	F. Aspinall	Mine	2	8	4	5	1.2	19.5	23.1	56.2	11750	
10-12-14	J. A. Richards	Mine	22	40	15	5	1.8	11.9	16.3	70.0	13350	Main entry No. 2 seam.
26-11-14	E. D. Black	Mine	6	53	23	4	25.4	5.7	27.1	41.8	8540	Main N.W. entry.
16-2-15	E. D. Black	Mine	33	45	23	5	3.2	4.3	30.5	62.0	14210	No. 1 seam.
29-3-15	E. D. Black	Mine	3	47	19	5	9.2	7.5	29.7	53.6	11280	No. 2 level.
11-12-14	F. Aspinall	Comm.	2	8	4	5	2.5	11.5	24.9	61.1	13140	Boiler Trial No. 68.
22-8-12	J. G. S. Hudson	Comm.	14	53	6	5	17.0	8.4	30.8	43.8	9040	Producer Trial.
6-9-14	F. Aspinall	Comm.	28	28	19	4	16.5	6.5	33.6	43.4	9650	Producer Trial.
8-12-14	F. Aspinall	Comm.	9	29	20	4	16.5	7.6	32.1	43.8	9590	Boiler Trial No. 61.
29-4-14	F. Aspinall	Comm.	6	49	27	5	2.3	21.4	18.5	57.8	11580	Boiler Trial No. 59.
17-4-14	F. Aspinall	Comm.	6	49	21	5	5.9	10.9	35.2	48.0	10930	
1912	J. G. S. Hudson	Comm.	17	8	4	5	2.5	17.0	24.0	56.5	12040	
30-10-14	F. Aspinall	Comm.	28	52	24	4	18.1	7.2	33.3	41.3	9160	
5-11-14	F. Aspinall	Comm.	29	7	3	5	2.7	18.8	25.5	53.0	11790	
1912	J. G. S. Hudson	Comm.	36	7	4	5	2.8	17.8	26.2	53.2	11910	
22-10-15	F. Aspinall	Comm.	24	55	25	4	20.0	8.0	31.6	40.4	8770	
		Mine	28	28	19	4	18.3	4.9	32.1	44.7	10030	

ANALYSES OF COAL.—Continued.

Date on Which Sample Was Taken	Name of Persons Taking Sample	Kind of Sample	Location of Mine from which samples were taken				Proximate Analysis				Calorific Value in B.T. Units	Remarks
			Sec.	Tp.	R.g.	W. of M.	Moisture	Ash	Volatile Matter	Fixed Carbon		
21-10-15	F. Aspinall	Mine	9	29	20	4	18.6	5.8	30.1	45.5	9890	River lot 26.
3-12-15	S. A. Jones	Mine	...	53	24	4	26.2	8.1	24.2	41.5	8040	
1-12-15	S. A. Jones	Mine	18	53	23	4	25.5	7.3	25.1	42.1	8250	
6-4-14	E. Heathcote	Mine	8	55	24	4	25.7	4.8	28.4	41.4	8630	Stewart seam. River lot 42.
2-12-15	S. A. Jones	Mine	7	53	23	4	23.6	8.8	25.1	42.5	8270	
3-12-15	S. A. Jones	Mine	...	53	25	4	23.2	5.7	26.5	44.6	8710	
4-12-15	J. A. Richards	Mine	28	24	10	5	1.9	6.2	9.8	82.1	14280	Stewart seam.
6-12-15	S. A. Jones	Mine	23	55	25	4	24.1	7.7	27.1	41.1	8240	
7-12-15	S. A. Jones	Mine	24	55	25	4	24.0	6.5	26.8	42.7	8390	
9-12-15	J. A. Richards	Mine	22	40	15	5	0.7	13.1	12.6	73.6	13370	No. 3 seam.
11-12-15	J. A. Richards	Mine	24	40	13	5	10.8	6.4	27.0	55.8	11150	
21-12-15	W. Shaw	Mine	12	10	22	4	8.7	11.2	28.0	52.1	10710	
3-5-16	F. Aspinall	Mine	18	39	15	4	27.9	5.0	26.7	40.4	8200	N. E. ¼. N. W. ¼.
5-5-16	F. Aspinall	Mine	36	40	16	4	25.3	5.1	28.1	41.5	8690	
5-5-16	F. Aspinall	Mine	36	40	16	4	25.4	5.8	27.8	41.0	8500	
7-7-16	F. Aspinall	Mine	19	26	11	5	0.6	13.6	8.8	77.0	12890	0000 seam. No. 2 seam.
12-7-16	F. Aspinall	Mine	19	26	11	5	0.6	9.7	8.2	81.5	13750	

For the purpose of giving more detailed information the Province has been divided into thirty-four districts. The following table gives the names and numbers of these districts along with the name and address of the District Inspector of Mines in charge of each:

No. of District	Name of District.	Name and Address of District Inspector of Mines.
1 2	Crow's Nest Pass. Pincher Creek.	William Shaw, Blairmore, Alberta. Telephone No. 70.
3 4 5 6 7 8 9	Lethbridge. Magrath. Milk River. Taber. Bow Island. Medicine Hat. Aldersyde.	Moses Johnson, Court House, Lethbridge, Alberta, Telephone No. 1225.
10 11 12 13 14 15	High River. Canmore. Banff. Drumheller. Big Valley. Brazeau.	Francis Aspinall, Calgary, Alberta, Telephone No. M2140.
16 17 18 19 20 21	Brooks. Hanna. Lacombe. Trochu. Three Hills. Carbon.	Duncan McDonald, Calgary, Alberta. Telephone No. M2140.
22 23 24 25 26 27 28 29 30 31 32 33 34	Battle River. Camrose. Tofield. Clover Bar. Edmonton. Nanaimo. Cardiff. Wabamun. Pembina. Jasper Park. Yellowhead. Mountain Park. Peace River.	James A. Richards, 11224 99th Ave., Edmonton, Alberta. Telephone No. 82738.

LIST OF MINES.

The following table gives particulars of mines which have been opened in the Province:

Mine No.	Operator.	No. of District	Location			Character of coal	Date of	
			Sec.	Tp.	Rge. of M.		Opening	Abandonment
								Re-opening
37	Ansley Coal Co., The	8	S. W. ¼	5	13	Lignite	1899	.....
42	Alberta Railway & Irrigation Co.	2	.....	10	5	Lignite	1905	1906
76	Alberta Coal & Coke Co., The	2	.....	23	7	Lignite	1906	1909
129	Alberta Coal Mining Co., Ltd.	28	N. E. ¼	23	55	Lignite	1907	.....
130	Alberta Consolidated Coal Co., Ltd.	6	.....	3	10	Lignite	1907	1913
223	Adams Coal Mine Co., Ltd.	3	S. E. ¼	16	10	Lignite	1910	1913
270	Arbaster & Lloyd	7	.....	5	11	Lignite	1911	1913
390	Abel, W. S.	5	S. W. ¼	1	3	Lignite	1913	1916
432	Ashmore, James	9	.....	24	16	Lignite	1914	1915
443	Anderson, William John	17	S. E. ¼	12	29	Lignite	1914	.....
474	Armour & Stauffer	14	S. E. ¼	23	31	Lignite	1915	1915
475	Aune, George	14	L. S. 2	22	31	Lignite	1915	.....
620	Alberta Block Coal Co., Ltd.	13	N. W. ¼	3	29	Lignite	1915	.....
628	Alberta Copper Co., Ltd.	12	2½ miles south of Eldon.	.....	20	Copper	1915	1916
632	Alberta Penitentiary	26	River Lot 20, Edmonton Sett.	.....	.....	Lignite	1915	.....
25	Banach & Hoynak	26	Near Edmonton South.	.....	.....	Lignite	1897	1899
26	Bailey, Robert	27	Near St. Albert.	.....	.....	Lignite	1897	1898
34	Bangs, J. A.	10	Sheep Creek near Lineham.	.....	.....	Lignite	1897	1900
45	Baldwin, J.	26	Near Edmonton.	.....	.....	Lignite	1900	1905
46	Bush Mine Coal Co., The	25	River Lot 42, Edmonton Sett.	.....	.....	Lignite	1905	.....
72	Blackfoot Indians	16	Indian Reserve S. of Gleichen.	.....	.....	Lignite	1902	.....
90	Byers Brothers	25	N. W. ¼	8	53	Lignite	1904	.....
98	Consolidated with No. 90	25	N. W. ¼	8	53	Lignite	1906	.....
117	Bothamley, C. F.	20	L. S. 10	22	31	Lignite	1906	1908
137	Bennett, Isaac	9	N. W. ¼	4	16	Lignite	1907	1915

LIST OF MINES—Continued.

Mine No.	Operator.	No. of District	Location			Character of coal	Date of		Re-Opening
			Sec.	Tp.	Rge. of M.		Opening	Abandonment	
143	Bell, W. J.	10	N. E. ¼	25	14	Lignite	1907	1913	.....
151	Brown, John W.	9	N. E. ¼	24	16	Lignite	1907	.....	.....
153	Burmis Coal Co.	1	N. E. ¼	14	7	Bituminous	1907	1916	.....
168	Beaver Dam Coal Co.	18	N. E. ¼	2	39	Lignite	1908	1913	.....
176	Bradshaw Mining Co.	4	N. E. ¼	2	7	Lignite	1908	1913	.....
206	Burdett City Coal Co.	7	N. E. ¼	23	10	Lignite	1909	1910	.....
229	Berford, Edward	6	N. W. ¼	18	10	Lignite	1910	1913	.....
232	Bawlf Collieries, Ltd., The	23	N. W. ¼	10	46	Lignite	1910	1913	.....
234	Baker, Hoge & Baker	16	N. W. ¼	11	17	Lignite	1910	1916	.....
237	Blain & Gilliland	28	N. W. ¼	24	55	Lignite	1910	.....	.....
240	Bevier, S. G.	18	N. W. ¼	32	39	Lignite	1910	1914	.....
245	Bish Bros. & Le Gear	22	N. W. ¼	36	40	Lignite	1910	.....	.....
248	Bish Bros. & Company	22	N. W. ¼	1	41	Lignite	1910	.....	.....
256	Brazeau Collieries, Ltd.	15	N. W. ¼	22	40	Bituminous	1910	.....	.....
284	Big Chief Coal Mining Co., Ltd.	5	N. W. ¼	9	1	Lignite	1911	1913	.....
288	Baines, Herbert	13	S. E. ¼	28	39	Lignite	1911	1916	.....
300	Bullock Coal Mining Co.	2	S. E. ¼	16	6	Lignite	1911	1913	.....
302	Battle River Collieries, Ltd.	23	S. E. ¼	7	46	Lignite	1911	.....	.....
305	Bonnie Brae Coal & Quarries, Ltd.	11	S. E. ¼	6	26	Bituminous	1911	1912	.....
306	Bennie, James Scott	5	S. E. ¼	3	11	Lignite	1911	1914	.....
356	Brown, Moses	8	N. E. ¼	28	12	Lignite	1912	1916	.....
364	Big Valley Collieries, Ltd.	14	N. W. ¼	1	36	Lignite	1912	.....	.....
365	British Collieries, Ltd.	15	N. W. ¼	5	43	Bituminous	1912	1913	.....
372	Bathurst Mining Co.	3	N. ½	19	10	Lignite	1912	1915	.....
391	Block Coal Collieries, Ltd.	6	N. ½	10	16	Lignite	1913	1916	.....
401	Black, William	5	L. S. 8.	10	3	Lignite	1913	1914	.....
404	Bergram, F.	18	L. S. 8.	18	39	Lignite	1913	1915	.....
416	Burns Coal Mines, Ltd., P.	11	L. S. 8.	18	6	Bituminous	1913	1915	.....

LIST OF MINES—Continued.

Mine No.	Operator.	No. of District	Location			Character of coal	Date of		
			Sec.	Tp.	Rge. of M.		Opening	Abandonment	Re-opening
					W. of M.				
429	Brule Lake Coal Co., Ltd.	31	L. S. 9.	15	50	Bituminous	1914	.....	.....
435	Bye, E. F.	5	.....	16	3	Lignite	1914	1914	.....
444	Bramley, Joseph	20	S. E. ¼	14	31	Lignite	1914	.....	.....
454	Berford, Edward	5	L. S. 12.	9	4	Lignite	1914	1915	.....
456	Brooks, Edmund J.	2	L. S. 9.	13	28	Lignite	1914	1914	.....
457	Bradley & Watson	2	.....	16	6	Lignite	1914	1914	.....
464	Brooks, Burton Thomas	13	L. S. 4.	23	29	Lignite	1915	.....	.....
481	Braley, Willis H.	5	L. S. 4.	16	4	Lignite	1915	1916	.....
485	Black Diamond Oil Fields, Ltd.	10	.....	29	19	Lignite	1915	1915	.....
486	Brown, Charles E.	17	S. W. ¼	29	32	Lignite	1915	.....	.....
490	Bryanton, I. K.	17	N. E. ¼	18	33	Lignite	1915	.....	.....
619	Ball, Matthew	19	N. E. ¼	10	35	Lignite	1915	.....	.....
647	Erisco, Frank	5	S. E. ¼	4	4	Lignite	1916	.....	.....
655	Brown, Samuel H.	34	L. S. 6.	21	70	Lignite	1916	.....	.....
659	Bennett, Isaac	9	N. E. ¼	29	16	Lignite	1916	.....	.....
660	Eaines, Herbert	18	S. E. ¼	28	39	Lignite	1916	.....	.....
665	Bergren & Anderson	18	N. E. ¼	21	39	Lignite	1916	.....	.....
321	Billwiller, Paul Werner	17	L. S. 7.	19	29	Lignite	1911	.....	.....
2	Canmore Coal Co., Ltd.	11	.....	29	24	Bituminous	1896	.....	.....
3	Canadian Pac. Ry. Dept. Nat. Res.	3	N. W. ¼	6	9	Lignite	1895	.....	.....
9	Clover Bar Coal Co., Ltd.	26	S. W. ¼	18	53	Lignite	1897	.....	.....
14	Consolidated with No. 9	26	L. S. 1.	18	53	Lignite	1897	.....	.....
32	Cardiff Collieries, Ltd., The	28	N. W. ¼	24	55	Lignite	1902	.....	.....
44	Carpenter, Elia	27	S. W. ¼	17	55	Lignite	1897	.....	.....
62	Cresswell, Charles	8	Near Medicine Hat	.....	.....	Lignite	1899	1899	.....
63	Cameron, John	10	Near Okotoks	.....	.....	Lignite	1902	1906	.....
75	Clark & Loughlin	27	S. W. ¼	16	55	Lignite	1902	1904	.....
			.....	.....	.....	Lignite	1903	1913	.....

LIST OF MINES—Continued.

Mine No.	Operator.	No. of District	Location			Character of coal	Date of	
			Sec.	Tp.	Rge. of M.		Abandonment	Re-opening
80	Canadian Pac. Ry. Dept. Nat. Res.	12	19	26	11	Anthracite	1903	.....
83	Consolidated Coal Mining Co.	8	2	9	5	Lignite	1905	.....
105	Canada West Coal Co., Ltd., The	6	S. E. ¼	31	16	Lignite	1905	.....
121	Carbon Brick & Coal Co.	21	19	29	23	Lignite	1906	.....
132	Canadian Pacific Railway Co.	6	N. W. ¼	7	10	Lignite	1907	.....
207	Carbon Hill Coal & Coke Co.	1	3	6	3	Bituminous	1909	.....
230	Cousins, R. W. K.	11	S. E. ¼	6	4	Bituminous	1910	.....
247	Chinook Coal Co., Ltd.	3	L. S. 7	12	22	Lignite	1910	.....
255	Conger, T. D.	19	S. W. ¼	17	23	Lignite	1910	.....
260	Conner Coal Mining Co., Ltd.	29	S. W. ¼	14	53	Lignite	1910	.....
293	Coal Securities Ltd.	2	S. W. ¼	6	2	Lignite	1911	.....
316	Cardston Coal & Coke Co.	5	N. W. ¼	26	2	Lignite	1911	.....
339	Collins, James A.	32	33	48	26	Bituminous	1912	.....
386	Cameron Bros.	27	S. W. ¼	17	21	Lignite	1913	.....
387	Cable Bros. & Williams	18	N. W. ¼	17	55	Lignite	1913	.....
420	Clarke & Davis	27	S. E. ¼	28	39	Lignite	1913	.....
424	Consumers' Coal Co., Ltd.	29	N. E. ¼	8	55	Lignite	1913	.....
434	Co-Operative Coal Co., Ltd.	6	S. E. ¼	30	52	Lignite	1914	.....
438	Curran, J. D.	11	S. E. ¼	4	10	Lignite	1914	.....
460	Clemens, P. F.	16	S. W. ¼	22	25	Bituminous	1914	.....
473	Cooke, W. R.	14	S. E. ¼	12	23	Lignite	1914	.....
492	Cattenach, Donald	17	S. E. ¼	28	31	Lignite	1915	.....
498	Carter, Marvin M.	18	N. E. ¼	6	34	Lignite	1915	.....
609	Carlson, John	22	S. W. ¼	37	15	Lignite	1915	.....
629	Calgary Copper Co., Ltd.	12	3 miles north of Eldon.	22	42	Copper	1915	.....
631	Charlton, Frank	19	L. S. 7	17	38	Lignite	1916	.....
657	Coldren, Earl	34	L. S. 3	28	83	Lignite	1916	.....
658	Crawford, William H.	5	L. S. 1	15	1	Lignite	1916	.....
634	Clarke, A. C.	13	N. E. ¼	14	28	Lignite	1916	.....

LIST OF MINES—Continued.

Mine No.	Operator.	No. of District	Location		Character of coal	Date of		
			Sec.	Tp.		Opening	Abandonment	Re-opening
8	Daly, William	26	N. E. ¼	7	Lignite	1903	.....	.....
104	Diamond Coal Co., Ltd.	3	N. W. ¼	31	Lignite	1905	1913	.....
115	Dodds, Currie & Hoding	21	L. S. 13	12	Lignite	1906	.....	.....
152	Driggs, H. A.	7	N. E. ¼	15	Lignite	1907	1910	.....
155	Dawson Coal Co., Ltd.	26	River Lot 25, Edmonton Sett.	10	Lignite	1907	.....	.....
173	Duncan, W. E.	6	N. W. ¼	29	Lignite	1908	1909	.....
190	Durrant, R. B.	2	N. W. ¼	36	Lignite	1909	1910	.....
236	Drowning Ford Coal Co., The	8	N. W. ¼	32	Lignite	1910	1914	.....
273	Davis & Green	18	S. W. ¼	18	Lignite	1911	.....	.....
285	Davis, Thomas	9	S. E. ¼	18	Lignite	1911	1913	.....
287	Davidson, G. W.	14	S. W. ¼	36	Lignite	1911	1914	.....
290	Davidson, R. T.	14	S. W. ¼	36	Lignite	1911	1914	.....
298	Consolidated with 290	14	S. W. ¼	36	Lignite	1911	1914	.....
326	Davis, W. M.	14	S. E. ¼	34	Lignite	1911	1914	.....
340	Dobell Coal Co., of Tofield, Ltd.	24	N. E. ¼	35	Lignite	1912	.....	.....
349	Drumheller Land Co., Ltd.	13	N. E. ¼	2	Lignite	1912	1916	.....
362	Duell, Richard	10	N. E. ¼	8	Lignite	1912	1915	.....
368	Duncan, J. H.	5	L. S. 13	4	Lignite	1912	.....	.....
381	Davis, Evan T.	5	N. E. ¼	6	Lignite	1913	1914	.....
425	Depew & Millar	4	S. W. ¼	8	Lignite	1914	1916	.....
452	Davis, John	2	N. E. ¼	17	Lignite	1914	1915	.....
453	Davis & Brown	2	N. E. ¼	27	Lignite	1914	1915	.....
463	Dennis, Wilson	2	N. E. ¼	31	Lignite	1914	1915	.....
605	Donaldson, Christopher S.	3	N. W. ¼	16	Lignite	1915	1916	.....
614	Dietrich Bros. & Johnson	22	L. S. 4	14	Lignite	1915	1916	.....
641	Davis, Evan T.	5	L. S. 4	35	Lignite	1916	1916	.....
651	Dunlop, Charles N.	34	L. S. 14	35	Lignite	1916	1916	.....
417	Davis, George	18	N. E. ¼	26	Lignite	1913	.....	.....

LIST OF MINES—Continued.

Mine No.	Operator.	No. of District	Location		Character of coal	Date of		
			Sec.	Tp. Rge. of M.		Opening	Aban- donment	Re- Opening
10	Edmonton Coal Co.	26	River Lot 22 Edmonton Sett.		Lignite	1897	1904	
20	Elliot & Louisberg	26	Near Edmonton.		Lignite	1897	1898	
50	Edmonton Coal Co.	26	River Lot 20, Edmonton Sett.		Lignite	1901	1904	
68	Evans & Robinson	26	River Lot 25, Edmonton Sett.		Lignite	1902	1905	
70	Ellis, William	10	9 18	2	Lignite	1902	1911	
118	Evans, John	8	S. E. ¼	5 13 6	Lignite	1906	1907	
213	Ervine, S.	7	9 10	13 4	Lignite	1909	1914	
218	Consolidated with No. 296	9	8 16	23 4	Lignite	1909		
259	Erickson Brothers	5	32 2	15 4	Lignite	1910	1913	
296	Ellis Brothers	9	S. E. ¼	8 16 23	Lignite	1911		
384	Ellis Coal Co., Ltd.	20	S. W. ¼	36 21 24	Lignite	1913		
410	Ensign, H. F.	7	24 12	8 4	Lignite	1913	1915	
674	Erickson, Gerhard	3	L. S. 4	16 10 21	Lignite	1916		
48	Franco-Canadian Collieries, Ltd.	1	N. W. ¼	30 7 3	Lignite	1900		
342	Footte, J. C.	7	L. S. 9	7 9 8	Lignite	1912	1916	
351	Forthin, W.	28	25 57	25 4	Lignite	1912	1913	
600	Ferguson, David	6	4 10	17 4	Lignite	1915	1915	
656	Finigan, John K.	34	S. W. ¼	25 70 11 6	Lignite	1916		
667	Falkner, William	18	1 39	23 4	Lignite	1916		
13	Gibbard & Boutwell	27	S. W. ¼	17 55 24	Lignite	1898	1901	
27	Gough & O'Neil	27	Sturgeon River near St. Albert.		Lignite	1896	1898	
35	Gillespie Bros.	10	N. E. ¼	6 13 6	Lignite	1898	1909	
54	Grace, A. M.	3	S. W. ¼	35 8 22	Lignite	1902		
58	Great Northern Railway	2	South of Pincher Creek.		Lignite	1901	1906	
67	Gallagher & Hull	26	Near Edmonton South.		Lignite	1902	1903	
89	Great West Coal Co., Ltd., The	25	7 53 23	4	Lignite	1906	1914	

LIST OF MINES—Continued.

Mine No.	Operator.	No. of District	Location				Character of coal	Date of		
			Sec.	Tp.	Rge. of M.	W.		Opening	Aban- (donment)	Re- Opening
99.	Great West Coal Co., Ltd., The	25	S. E. ¼	7	53	23	4	Lignite	1903	.....
127	Garneau, Larry, Jr.	26	River Lot 7, Edmonton Sett.					Lignite	1907	.....
162	Gillespie, Francis	4	S. W. ¼	1	7	22	4	Lignite	1907	1908
184	Good, Rola B.	2	N. W. ¼	11	11	1	5	Lignite	1909	1911
200	Geddes, Day & Gibb	8		2	9	6	4	Lignite	1909	1914
201	Golden West Coal Mining Co., Ltd.	6	L. S. 4	18	10	16	4	Lignite	1909	.....
211	Green, H. V.	18	S. E. ¼	18	39	15	4	Lignite	1909	1914
231	Georgetown Collieries, Ltd.	11	N. W. ¼	1	25	11	5	Bituminous	1910	1916
278	Gorgenson, Sebb	5	L. S. 9	16	3	12	4	Lignite	1911	1911
283	Great West Coal Co., Ltd., The	25	S. W. ¼	6	53	23	4	Lignite	1911	1915
289	Gray, Armour	18	N. E. ¼	28	39	16	4	Lignite	1911	1915
294	Gibson, George	7	S. W. ¼	25	9	13	4	Lignite	1911	1913
297	Ginther, F. M.	8	S. W. ¼	12	13	9	4	Lignite	1911	1912
299	Gilbert, O. N.	13	S. W. ¼	29	26	21	4	Lignite	1911	.....
336	Gardner, R.	8		3	16	5	4	Lignite	1912	1912
352	Gainford Collieries, Ltd.	30		14	53	6	5	Lignite	1912	1914
359	Grant, John A.	10		21	19	2	5	Lignite	1912	1913
421	Goodie, Philip	5	L. S. 10	10	3	11	4	Lignite	1913	1915
458	Gilruth, James Alex.	2	L. S. 8	27	4	28	4	Lignite	1913	1915
459	Gardner, Fred	20		15	30	23	4	Lignite	1914	1914
487	Giedd, Fred	17	L. S. 2	3	33	16	4	Lignite	1914	1915
603	Griffiths, Evan	22	N. E. ¼	32	41	18	4	Lignite	1915	1915
623	Gordon, D. R.	19	S. W. ¼	32	33	22	4	Lignite	1915	1916
672	Guthro & Barr	7	L. S. 3	27	12	10	4	Lignite	1916	.....
6	Humberstone, William	26	River Lot 12, Edmonton Sett.					Lignite	1896	1905
17	Holloway, R.	26	Big Island, N. Saskatchewan River.					Lignite	1899	1899
40	Hillcrest Collieries, Ltd.	1	N. E. ¼	18	7	3	5	Bituminous	1905	.....

LIST OF MINES—Continued.

Mine No.	Operator.	No. of District	Location			Character of coal	Date of	
			Sec.	Tp.	Rge. of M.		Opening	Abandonment
								Re-opening
43	Humberstone Coal Co., The	25	L. S. 15.	7	53	Lignite	1899	.....
109	Harper Coal Co.	26	River Lot 22, Edmouton			Lignite	1906	1910
134	Henderson Brothers	9	N. E. ¼	29	16	Lignite	1907	1913
171	Hanna & Moe	6	N. E. ¼	27	9	Lignite	1908	1909
181	Hart, Edward	6	S. E. ¼	11	10	Lignite	1908	.....
189	Hedstrom Brothers	21	S. W. ¼	7	29	Lignite	1909	1916
209	Head Syndicate, Ltd.	1	S. W. ¼	9	7	Bituminous	1909	1913
212	Hilker, Carl Gus	18	N. W. ¼	8	39	Lignite	1909	.....
214	Halbert, William	20	N. W. ¼	22	31	Lignite	1909	1915
215	Hyde, Ltd., Marcus L.	23	L. S. 11.	14	49	Lignite	1909	.....
224	Henderson, Samuel	9	L. S. 11.	29	16	Lignite	1910	1915
254	Heighes, George	3	L. S. 11.	27	10	Lignite	1910	1914
271	Hollander, C. E.	5	S. W. ¼	26	2	Lignite	1911	.....
272	Hutchison, John S.	7	S. E. ¼	15	9	Lignite	1911	1915
274	Halkirk Collieries	18	N. E. ¼	30	38	Lignite	1911	1913
315	Halbert, David	19	S. E. ¼	14	33	Lignite	1911	.....
329	Henev, John	18	N. E. ¼	4	38	Lignite	1911	.....
335	Hutchison, W. S.	13	N. E. ¼	14	29	Lignite	1912	1915
345	Henry, Charles Freeman	7	N. W. ¼	6	8	Lignite	1912	.....
354	Hand Hill Coal Co.	17	N. W. ¼	21	30	Lignite	1912	.....
366	Holmes, Joseph	7	South of Grassy Lake.			Lignite	1912	1913
373	Hedrich, William	19	S. E. ¼	20	33	Lignite	1912	1913
377	Hancock, Mark	7	S. W. ¼	25	9	Lignite	1913	.....
426	Halbert, William	19	N. E. ¼	12	33	Lignite	1914	1914 10/ 7/16
427	Hronek, Benjamin	18	L. S. 7.	18	39	Lignite	1914	.....
437	Hudson, William H.	9	L. S. 7.	23	18	Lignite	1914	1915
472	Hildahl, Edwin	14	L. S. 7.	28	31	Lignite	1915	.....
477	Hallday, George W.	17	L. S. 3.	28	30	Lignite	1915	.....

LIST OF MINES—Continued.

Mine No.	Operator.	No. of District	Location			Character of coal	Date of	
			Sec.	Tp.	Rge. of M.		Opening	Abandonment
499	Howells, John	6	S. E. ¼	4	10	17	1915	1916
638	Harrison, Stephen	3	S. W. ¼	35	8	22	1916	1916
643	Henderson & Shaw	13	S. E. ¼	7	28	19	1916	1913
390	Halliday, George W.	17	S. W. ¼	28	30	17	1913	1913
88	International Coal & Coke Co., Ltd.	1		8	8	4	1903	1906
111	Irvine, Thomas	6		4	10	17	1906	1910
114	Independent Coal Co., Ltd., The	6	S. E. ¼	4	10	17	1906	1913
138	International Land Dev. Co.	7		19	10	9	1907	1907
159	Imperial Coal Co.	6		5	10	17	1907	1910
419	Island Lake Coal Co.	29	N. E. ¼	9	53	4	1913	1913
242	Johnson, John S.	22	S. W. ¼	15	44	19	1910	1916
269	James, C. K.	18	N. W. ¼	18	39	15	1911	1913
280	Jasper Park Collieries, Ltd.	31	L. S. 9	6	49	27	1911	1913
312	James, C. K.	18	S. E. ¼	28	39	16	1911	1913
371	Jacobson, John	7	L. S. 8	21	12	10	1912	1913
407	Jaynes, Robert	5	N. E. ¼	29	2	15	1913	1915
462	Jeffrey, James	2		32	10	2	1914	1915
470	Joberg, A. F.	17	N. W. ¼	21	30	17	1915	1915
482	Consolidated with 470	17	N. W. ¼	21	30	17	1915	1915
627	Jackson, Walter	22	N. W. ¼	32	41	18	1915	1916
673	James & McKim	18	N. E. ¼	18	39	15	1916	1916
53	Knee Hill Coal Co., Ltd.	21	S. W. ¼	14	29	23	1898	1915
69	Keith & Fulton	25	N. E. ¼	7	53	23	1902	1915
103	Knowlton, G. H.	11	L. S. 14	19	29	5	1905	1913
120	Kummer, William	10	S. W. ¼	8	18	2	1906	1913

LIST OF MINES—Continued.

Mine No.	Operator.	No. of District	Location			Character of coal	Date of	
			Sec.	Tp.	Rge. of M.		Opening	Abandonment
					W.			Re-Opening

LIST OF MINES—Continued.

Mine No.	Operator.	No. of District	Location			Character of coal	Opening	Date of	
			Sec.	Tp.	Rge. of M.			Aban- donment	Re- Opening
491	Luck & Sinclair	17	L. S. 16.....	18	29	14	4	1915	.....
601	Law, George	23	N. E. ¼.....	10	48	18	4	1915	.....
618	Lux & Harrison	22	L. S. 9.....	26	40	16	4	1915	.....
676	Lethbridge Land & Coal Co.	3	S. W. ¼.....	12	9	22	4	1916	.....
5	Martin, Robert	26	River Lot 26, Edmonton Sett.				Lignite	1897	1902
12	Martin & King	26	River Lot 26, Edmonton Sett.				Lignite	1897	1904
15	Marsh & Neeb	26	River Lot 18, Edmonton Sett.				Lignite	1897	1902
24	Molloy & Carterra	26	L. S. 12.....	20	51	25	4	1897	1906
52	Mays Coal Co.	25	L. S. 12.....	7	53	23	4	1901	1902
60	Martin, E. D.	26	River Lot 25, Edmonton Sett.				Lignite	1902	1904
74	Milner & Shoeman	25	7	53	23	23	4	1903	1913
100	Martin Brothers	26	20	51	1	5	5	1905	1905
124	Marsh, John	26	4	10	17	4	4	1906	1910
133	Maple Leaf Coal Co., Ltd.	1	16	7	3	3	5	1907	1915
140	Marsh, John	6	19	9	17	4	4	1907	1908
158	Marsh Brothers	6	S. E. ¼.....	4	10	17	4	1907	1910
175	Marsh, John	6	29	9	17	4	4	1908	1909
180	Mills, Jonathan James	7	N. W. ¼.....	23	9	13	4	1908	1909
266	Murphy, M. T.	7	9	12	10	4	4	1911	1911
282	Mountain Park Coal Co., Ltd.	33	33	45	23	30	5	1911	1911
292	Morris, John	2	16	6	30	4	4	1911	1913
308	Miskulin & Wukusich	5	S. E. ¼.....	10	3	11	4	1911	1911
323	Morgan, Arthur	7	L. S. 8.....	14	9	11	4	1911	1911
331	Mitchell, A. E.	7	S. W. ¼.....	3	10	11	4	1912	1913
267	Midland Collieries, Ltd.	13	N. E. ¼.....	9	29	20	4	1912	1912
395	Molloy, Michael	3	N. W. ¼.....	27	10	21	4	1913	1913
447	Martin, Louis	22	N. W. ¼.....	28	40	15	4	1914	1915

LIST OF MINES—Continued.

Mine No.	Operator.	No. of District	Location			Character of coal	Date of	
			Sec.	Tp.	Rge. of N.		Opening	Abandonment
451	Meheltz, Frank	18	S. E. ¼	11	16	Lignite	1914	.....
466	Moore, Clark	16	S. W. ¼	15	17	Lignite	1915	1915
478	Mason, Hugh A.	17	L. S. 12	13	17	Lignite	1915	1916
489	Murray, John	7	.....	9	10	Lignite	1915	1915
602	Manchenko, Taras	8	L. S. 6	2	9	Lignite	1915	.....
604	March, Adam	22	L. S. 15	32	41	Lignite	1915	.....
606	Morris, John	2	N. W. ¼	26	7	Lignite	1915	1916
615	Martin, Charles F.	22	L. S. 1	28	42	Lignite	1915	.....
617	Morland Brothers	18	.....	24	37	Lignite	1915	1916
622	Miner, Albert	22	S. W. ¼	8	43	Lignite	1915	.....
649	Moody, James	5	L. S. 16	22	2	Lignite	1916	.....
650	May, Frank	5	L. S. 9	6	2	Lignite	1916	.....
658	May, Frank	5	L. S. 3	7	2	Lignite	1916	.....
675	Murray, John N.	13	.....	28	28	Lignite	1916	.....
30	McPherson, A. D.	10	L. S. 13	8	20	Lignite	1899	.....
49	McPeak Coal Co.	26	112th Ave. & 76th St.,	Edmonton.	2	Lignite	1905	.....
119	MacIntosh, C. G.	10	.....	16	18	Lignite	1906	1908
149	McDevitt, J. J.	24	S. W. ¼	24	50	Lignite	1907	.....
167	McKay & McIntosh	18	S. E. ¼	11	39	Lignite	1908	.....
204	McGillivray Creek C. & C. Co., Ltd.	1	.....	17	8	Bituminous	1909	.....
217	McWilliams, Alex.	3	.....	8	10	Lignite	1909	1911
222	McFarlane, William	2	.....	27	6	Lignite	1910	.....
246	McCormack, A. D.	18	L. S. 14	34	37	Lignite	1910	1913
253	McKinnon, A. D.	2	.....	36	5	Lignite	1910	.....
279	McKay, Daniel G.	5	L. S. 1	1	3	Lignite	1911	1915
304	McLean, Hugh D.	18	S. E. ¼	34	37	Lignite	1911	.....
318	McKenzie, Duncan	21	N. E. ¼	29	30	Lignite	1911	1916

LIST OF MINES—Continued.

Mine No.	Operator.	No. of District	Location			Character of coal	Date of		
			Sec.	Tp.	Rge. of M.		Opening	Abandonment	Re-opening
334	McAllister, Robert	8	29	13	10	Lignite	1912	1914	.....
343	McGuire, A. J.	3	25	8	22	Lignite	1912	1913	.....
385	McGuire, James S.	19	16	33	23	Lignite	1913	1913	.....
398	McCafferty, Thomas	17	18	33	13	Lignite	1913	1915	.....
405	McIntyre, William H.	4	24	3	22	Lignite	1913	.....	.....
408	McGuire, A. J.	1	24	8	5	Bituminous	1913	1913	.....
415	McKenzie, H.	17	5	29	14	Lignite	1913	.....	.....
455	McPherson, Peter	2	3	4	28	Lignite	1914	.....	.....
468	McFadden & Farnell	14	36	35	20	Lignite	1915	1916	.....
476	McNaughton & Blusson	9	33	15	23	Lignite	1915	.....	.....
612	McLean, Charles A.	17	6	30	13	Lignite	1915	1916	.....
664	McTaggart & Morton	18	33	38	22	Lignite	1916	.....	.....
57	Nash, Thomas	2	34	5	29	Lignite	1902	1913	.....
141	Namoo Coal Co.	27	3	55	24	Lignite	1907	1909	.....
174	North American Collieries, Ltd.	3	21	9	22	Lignite	1908	.....	.....
199	North American Collieries, Ltd.	2	9	6	2	Lignite	1909	1915	.....
203	New Barnes Coal Mine Co.	3	31	9	21	Lignite	1909	.....	.....
227	North American Collieries, Ltd.	30	30	53	7	Lignite	1910	.....	.....
233	North American Collieries, Ltd.	32	3	47	19	Bituminous	1910	.....	.....
257	Noble, William G.	16	7	23	14	Lignite	1910	.....	.....
267	North American Collieries, Ltd.	26	28	53	25	Lignite	1911	1916	.....
275	National Coal Co., The	18	3	38	14	Lignite	1911	.....	.....
310	North Alberta Coal Syndicate	31	29	46	26	Bituminous	1911	1913	.....
317	Newcastle Coal Co., Ltd.	13	9	29	20	Lignite	1911	.....	.....
327	Nichol & Bradshaw	19	5	34	22	Lignite	1911	1913	.....
348	Neisner, John	13	23	29	20	Lignite	1912	1916	.....
350	Northern Construction Co.	15	..	39	10	Bituminous	1912	1914	.....

LIST OF MINES—Continued.

Mine No.	Operator.	No. of District	Location			Character of coal	Date of		
			Sec.	Tp.	Rge. of M.		Opening	Abandonment	Re-opening
357	Nash, Thomas	2	27	4	28	Lignite	1912	1914	.....
376	Nelson & Johnson	19	30	34	21	Lignite	1913	1914	.....
393	North Kootenay Pass Coal Co.	1	29	7	4	Bituminous	1913	1913	.....
412	New Era Coal Co., Ltd.	29	14	53	4	Lignite	1913	1915	.....
418	Consolidated with 275	18	..	..	..	Lignite	1913	.....	.....
613	Norman, Oscar	22	S. E. ¼	30	17	Lignite	1915	.....	.....
56	Oliver, Edward	4	7	7	21	Lignite	1909	1913	.....
91	Ottewill, R. P.	25	S. W. ¼	17	23	Lignite	1904	.....	.....
295	Owen, J. H.	2	S. E. ¼	10	1	Lignite	1911	.....	.....
648	Oliphant-Nunson Collieries, Ltd.	32	N. E. ¼	23	48	Bituminous	1916	.....	.....
670	Olson, Emil	17	S. W. ¼	19	14	Lignite	1916	.....	.....
139	Patterson, Thomas	6	S. E. ¼	26	18	Lignite	1907	1907	.....
145	Pincher Creek Coal Mining Co.	2	17	6	30	Lignite	1907	1913	.....
161	Perry, James	3	2	7	22	Lignite	1907	1914	.....
166	Penman, William	18	S. W. ¼	34	23	Lignite	1908	.....	.....
178	Consolidated with 397	27	S. E. ¼	8	24	Lignite	1908	.....	.....
187	Poxon, Wilfred	21	S. E. ¼	15	23	Lignite	1909	.....	.....
197	Consolidated with 226	16	S. W. ¼	9	17	Lignite	1909	.....	.....
210	Premier Coal & Coke Co., Ltd.	1	..	5	4	Bituminous	1909	1914	.....
226	Prairie Coal Co., Ltd.	16	16	17	17	Lignite	1910*	.....	.....
261	Paulson, P. A.	1	S. E. ¼	9	4	Bituminous	1910	1913	.....
369	Petrie, J. H.	26	28	51	25	Lignite	1912	1913	.....
392	Peace River Collieries, Ltd.	31	1	60	14	Bituminous	1913	1913	.....
394	Palmer Coal Co.	1	25 miles S.W. of Burmis.	..	..	Bituminous	1913	1913	.....
397	Porte, Allan Jackson	27	S. E. ¼	8	24	Bituminous	1913	1915	.....
400	Pearls, John P.	7	L. S. 8.	21	10	Lignite	1913	1910/16	.....

LIST OF MINES.—Continued.

Mine No.	Operator.	No. of District	Location			Character of coal	Date of	
			Sec.	Tp.	Rge of M.		Aban- donment	Re- Opening
250	Round Hill Collieries, Ltd.	23	S. E. ¼	30	18	Lignite	1910	.....
301	Robinson, U. G.	14	Near Big Valley	48	18	Lignite	1911	.....
320	Rider Bros.	18	N. W. ¼	31	40	Lignite	1911	.....
325	Russian Coal Co., The	18	L. S. 8.	4	38	Lignite	1911	10/ 5/15
332	Redcliff Clay Products Co., Ltd.	8	N. W. ¼	9	13	Shale	1912	.....
344	Raber, Elsworth	7	L. S. 13	22	10	Lignite	1912	.....
346	Rosedale Coal & Clay Products Co., Ltd.	13	N. W. ¼	28	19	Lignite	1912	.....
347	Rose-Deer Coal Mining Co., Ltd.	13	N. E. ¼	7	28	Lignite	1912	.....
353	Roberts, William	7	N. E. ¼	36	6	Lignite	1912	.....
363	Rathburn, L. F.	10	S. W. ¼	8	18	Lignite	1912	.....
379	Redcliff Pressed Brick Co., Ltd.	8	S. W. ¼	9	13	Shale	1913	3/ 7/16
402	Red Deer Valley Coal Co., Ltd.	13	S. W. ¼	7	29	Lignite	1913	.....
406	Consolidated with 433	10	S. W. ¼	2	53	Lignite	1913	.....
431	Rambo, M. C.	30	N. W. ¼	2	17	Lignite	1914	.....
433	Romey, August Henry	10	S. E. ¼	2	20	Lignite	1914	.....
446	Ruffell, Alfred	3	S. E. ¼	31	9	Lignite	1914	.....
450	Robinson, William	22	L. S. 8.	32	40	Lignite	1914	.....
465	Raisback, Luke	7	S. ½	3	10	Lignite	1915	.....
469	Ross, R. A.	14	L. S. 9.	34	34	Lignite	1915	.....
479	Royal, Edward	17	S. W. ¼	12	31	Lignite	1915	.....
493	Consolidated with 325	18	S. E. ¼	10	38	Lignite	1915	.....
608	Richmond, Andrew	18	S. E. ¼	25	70	Lignite	1916	.....
653	Ray, George Alex.	34	S. E. ¼	28	30	Lignite	1916	.....
671	Reed, Archer McKee	21	S. W. ¼	28	30	Lignite	1916	.....
28	Stewart & Campbell	27	N. E. ¼	8	55	Lignite	1897	.....
47	Strathcona Coal Co.	26	River Lot 9, Edmonton Sett.	6	13	Lignite	1905	.....
61	Scott, Fred	8	S. E. ¼	6	13	Lignite	1911	.....

LIST OF MINES.—Continued.

Mine No.	Operator.	No. of District	Location			Character of coal	Date of		Re-Opening
			Sec.	Tp.	Rge of M.		Opening	Abandonment	
101	Sturgeon Con. Collieries, Ltd.	27	N. W. ¼	9	55	Lignite	1905	1911	.....
110	Sutherland, Murdock	27	.....	4	55	Lignite	1906	1911	.....
135	Smith, T. Edwin	9	L. S. 2	36	14	Lignite	1906	.....	.....
144	Scott & MacLaine	2	.....	20	5	Lignite	1907	1914	.....
157	Southern Alberta Coal Co., Ltd., The	6	.....	8	10	Lignite	1907	1911	.....
163	Shirts, James E.	6	S. E. ¼	30	10	Lignite	1908	1911	.....
183	Consolidated with 244	23	.....	.....	.....	.....	1909	1913	.....
195	Standard Lethbridge Collieries, Ltd.	3	S. E. ¼	28	9	Lignite	1909	1911	.....
196	Speers, H.	27	N. E. ¼	8	55	Lignite	1909	1914	.....
202	Superior Coal Co., Ltd., The	6	N. W. ¼	18	10	Lignite	1909	1913	.....
238	Simpson, M.	7	.....	36	11	Lignite	1910	1913	.....
239	Savage, George W.	7	L. S. 10	35	12	Lignite	1910	1912	1/ 5/16
241	Spicer Coal Co., Ltd., The	23	S. W. ¼	18	48	Lignite	1910	.....	.....
244	Stony Creek Collieries, Ltd., The	23	L. S. 1	33	46	Lignite	1910	.....	.....
249	Schares, J. M.	22	L. S. 9	16	42	Lignite	1910	1916	.....
258	Sinclair, A. C.	17	.....	21	28	Lignite	1910	1911	.....
262	Smith, John H.	17	L. S. 2	19	29	Lignite	1910	.....	.....
263	Security Coal Mines Co., Ltd.	29	N. E. ¼	14	53	Lignite	1911	1913	.....
264	Stavelly Coal Mining Co.	9	N. E. ¼	29	14	Lignite	1911	1916	.....
265	Stanton, W. H.	7	S. E. ¼	22	12	Lignite	1911	1911	.....
268	Strader & Green	18	S. E. ¼	18	39	Lignite	1911	1916	.....
276	Stockett, George	3	L. S. 13	9	10	Lignite	1911	1915	23/12/16
286	Square Deal Mercantile Co.	14	S. W. ¼	26	35	Lignite	1911	1913	.....
307	Sanderson, William John	9	N. W. ¼	8	15	Lignite	1911	1913	.....
311	Seale, James	5	.....	22	1	Lignite	1911	1913	.....
341	Santoni, Louis	7	L. S. 16	5	8	Lignite	1912	.....	.....
355	Stainton, George F.	13	.....	29	29	Lignite	1912	1914	.....
358	Salisbury, Robert A.	7	L. S. 12	22	12	Lignite	1912	.....	.....

LIST OF MINES.—Continued.

Mine No.	Operator.	No. of District	Location			Character of coal	Date of	
			Sec.	Tp.	Rge of M.		Opening	Abandonment
					W.			Re-Opening
360	Schultz, J. B.	16	N. W. ¼	2	25	Lignite	1912	
370	Schmidt, Stephen	7	L. S. 16	30	7	Lignite	1912	
374	Schmidt & Wilson	23	N. E. ¼	12	48	Lignite	1912	1914
388	Saunders Creek Coal Co., Ltd., The	15	N. E. ¼	24	40	Bituminous	1913	
389	Smith, Frank	27	N. E. ¼	8	55	Lignite	1913	
422	Sterling Coal Co., Ltd.	13	S. W. ¼	9	29	Lignite	1914	
436	Star Coal Mines, Ltd., The	13	S. E. ¼	28	28	Lignite	1914	
461	Smith, Thomas Edwin	9	L. S. 9	28	15	Lignite	1914	
494	Smithson, Irving	18	L. S. 5	20	37	Lignite	1915	1916
610	Strliczyk, Louis	23	L. S. 8	10	48	Lignite	1915	
625	Sickstrum, O. R.	22	L. S. 14	14	43	Lignite	1915	
636	Stewart, Robert	17	L. S. 12	6	30	Lignite	1916	1916
639	Spencer, Fred	14	L. S. 5	36	35	Lignite	1916	
642	Swanson, F. A.	5	L. S. 5	22	2	Lignite	1916	
645	Schallert & Youngburg	27	S. W. ¼	6	55	Lignite	1916	
663	Smith, Thomas Edwin	9	L. S. 3	17	15	Lignite	1916	
666	Simmons, Efner W.	22	N. E. ¼	2	41	Lignite	1916	1916
16	Talbot, Mr.	27	S. E. ¼	17	55	Lignite	1904	1908
59	Tonge, Thomas	2	N. E. ¼	26	7	Lignite	1902	
112	Three Hills Coal & Dev. Co., Ltd.	20	S. W. ¼	35	31	Lignite	1906	1913
113	Trentham, Albert	20	L. S. 16	26	31	Lignite	1906	
136	Therriault, Henry	9	S. E. ¼	8	15	Lignite	1907	
150	Consolidated with 250	24					1907	
160	Thorne, John	10	River Lot 17, Edmonton Sett.	9	18	Lignite	1907	1909
177	Twin City Coal Co., Ltd.	26	L. S. 13	9	10	Lignite	1908	
225	Thomas, John	3	N. ½	26	50	Lignite	1910	1911
252	Tofield Coal Co., Ltd.	24					1910	

LIST OF MINES.—Continued.

Mine No.	Operator.	No. of District	Location			Character of coal	Date of		
			Sec.	Tp.	Rge of M.		Opening	Abandonment	Re-opening
					W.				
313	Tonge & Gorton	2	L. S. 1.	16	6	Lignite	1911	1911	
322	Trochu Coal Co., The	19	S. E. ¼	34	23	Lignite	1911	1913	
382	Thorpe, George W.	7	L. S. 4.	16	7	Lignite	1913	1914	
449	Turney, James R.	22	L. S. 15.	36	40	Lignite	1914		
495	Thompson, Ole	19	L. S. 16.	12	36	Lignite	1915		
616	Tate, John F.	22	S. E. ¼	18	43	Lignite	1915	1916	
637	Trentham, William Timothy	20	N. E. ¼	22	31	Lignite	1915		
646	Trentham, Harry	17	L. S. 1.	1	34	Lignite	1916		
652	Taft, John B.	34	N. E. ¼	35	70	Lignite	1916	1916	
488	Unsworth, Robert	17	L. S. 14.	6	33	Lignite	1915		
64	West Canadian Collieries, Ltd.	1	8	8	3	Bituminous	1902	1913	
77	Welsh, William	2	26	7	2	Lignite	1903	1913	
87	West Canadian Collieries, Ltd.	1	20	7	3	Bituminous	1903		
102	Wilson, John	26	L. S. 10.	1	10	Lignite	1904	1905	
106	White Ash Collieries, Ltd., The	6	West of Leduc.	22	31	Lignite	1905	1916	
116	Watson, George	20	L. S. 3.	22	31	Lignite	1906	1915	
122	Wetaskiwin Coal Co.	26	L. S. 13.	20	51	Lignite	1907	1915	
142	Watson, George	20	22	31	24	Lignite	1907	1915	
148	Western Coals, Ltd.	26	River Lot 31, Edmonton Sett.	31	2	Lignite	1907	1915	
179	Weaver, Edward	5	W. ½	31	15	Lignite	1908		
186	Walwork, James	7	S. W. ¼	36	11	Lignite	1909	1912	
193	West Canadian Collieries, Ltd.	1	S. E. ¼	35	7	Bituminous	1909		
198	Watkins, Watkin E.	9	N. W. ¼	4	16	Lignite	1909		
251	Wilkinson, Julius	22	N. E. ¼	28	42	Lignite	1910		
291	Wagner, Joseph	18	S. W. ¼	28	39	Lignite	1911	1916	
303	Watson, George	20	L. S. 11.	22	31	Lignite	1911		

LIST OF MINES.—Continued.

Mine No.	Operator.	No. of District	Location			Character of coal	Date of	
			Sec.	Tp.	Rge of M.		Opening	Aban- donment	Re- Opening
314	Walsh, William R.	19	S. E. ¼	29	23	Lignite	1911	
361	Woolings, Joseph	10	N. W. ¼	7	22	Lignite	1912	
396	West Canadian Collieries, Ltd.	1		2	8	Bituminous	1913	
409	Wall, John H.	4	L. S. 4	17	7	Lignite	1913	1915
428	Wilcox Fiss & Co.	27	N. E. ¼	8	24	Lignite	1914	1915
430	Weaver, Hugh	22		18	44	Lignite	1914	1915
442	Williscroft, W. & G.	27	S. E. ¼	3	55	Lignite	1914	1915
445	Wilson, Charles S.	20	L. S. 6	14	31	Lignite	1914	
448	Walwork, Walter	7	S. E. ¼	36	11	Lignite	1914	
471	Wooden, Clyde M.	14	N. E. ¼	18	34	Lignite	1915	
497	Wadsworth, Samuel	17	L. S. 1	19	29	Lignite	1915	
624	Williams, C.	10		4	22	Lignite	1915	1916
630	Consolidated with 243							
243	Washkoski, Michael S.	18	S. E. ¼	26	37	Lignite	1910	1916
640	Western Commercial Co., Ltd.	13	S. E. ¼	7	28	Lignite	1916	
654	Waldo, Walter H.	34	L. S. 14	24	70	Lignite	1916	
669	White Ash Collieries, Ltd.	6	L. S. 3	1	10	Lignite	1916	
220	Yellowhead Coal Co., The	32		6	49	Bituminous	1910	1915
328	Yard, George C.	19	S. W. ¼	13	34	Lignite	1911	21/11/16
337	Yard, George C.	19	S. W. ¼	10	34	Lignite	1912	1916
661	Yard, George C.	19	L. S. 4	10	34	Lignite	1916	
383	Consolidated with mine 403					Lignite	1913	1916
403	Zarth & Embury	13	L. S. 7	22	29	Lignite	1913	

CROW'S NEST PASS DISTRICT.—DISTRICT NO. 1.

Hillcrest Collieries, Limited. (Mine No. 40).

Mine Office: Hillcrest.
 Head Office: 112 St. James St., Montreal, Quebec.
 Authorized Capital: \$3,000,000.00.
 President: C. B. Gordon.
 Vice-President: C. Meredith.
 Directors: C. B. Gordon, Sir Herbert Holt, W. D. Matthews, J. M. Mackie, C. Meredith, G. H. Dugan, M. P. Davis, C. P. Hill, C. R. Hamilton.
 Secretary: F. J. Smith.
 Treasurer: F. J. Smith.
 General Manager: Robert G. Drinnan.
 Manager: R. T. Stewart.
 Overman: Daniel Briscoe.
 Examiners: John Ironmonger, W. Adlam, A. Crawford, T. Harrison, J. McKelvie, W. Harmison.
 Mine Surveyor: David S. Hutchison.
 Location of Mine: N. E. $\frac{1}{4}$, Sec. 18, Tp. 7, Rge. 3, West of the 5th Mer.
 Area: 4,120 acres. Character of Coal: Bituminous.
 Name of Owner of Property: Hillcrest Collieries, Ltd.
 Address of Owner: 112 St. James St., Montreal, Quebec.

No. 1 seam which is being worked has an average thickness of 14 feet, with a hard sandstone roof and hard sandy shale floor, and dips from 15 to 60 degrees in an easterly direction, the cover varying from a few feet to 1,500 feet in thickness.

The mine is entered by a slope 7 ft. high by 12 ft. wide by 2,500 ft. long on an inclination of from 15 to 25 degrees.

The system of working is pillar and stall, entries being driven off the slope 10 ft. wide by 7 ft. high, and rooms driven up the pitch 12 ft. wide by 14 ft. high. Each section of fifteen rooms is separated by a solid barrier of coal, the pillars between rooms being 50 ft. square. The capacity of the plant is 1,200 tons in eight hours, the mine cars holding two tons. Wolf safety lamps are used by all workmen except drivers and slopemen, who are supplied with electric cap lamps of the Edison type.

Franco-Canadian Collieries, Limited. (Mine No. 48).

Mine Office: Frank.
 Head Office: Frank.
 Authorized Capital: \$1,300,000.00.
 President: Viscount Pierre de Chezelles.
 Directors: Viscount P. de Chezelles, G. Cahen, G. Berthier, A. Ollier, L. Motte, J. Saint-Girons, R. Perry, H. Luthard, H. A. Howard, J. M. Windsor.
 Secretary and Business Manager: C. J. Thompkins.
 Treasurer: C. J. Thompkins.
 Managing Director: G. Cahen.
 Manager: John R. McDonald.
 Overmen: Thomas Davies, David Muir.
 Examiners: Fred Rayner, George Coupland, John Prentice, John Baird, James Gladwin, John Crawford.
 Mine Surveyor: G. A. Lavoie.
 Location of Mine: N. W. $\frac{1}{4}$ Sec. 30, Tp. 7, Rge. 3, West of the 5th Mer.
 Area: 2,560 acres. Character of Coal: Bituminous.
 Owner of Property: Franco-Canadian Collieries, Ltd., Frank.

The Gebo seam which is being worked has an average thickness of 12 ft. with a shale roof and sandstone pavement, and dips from

42 to 85 degrees in a northerly direction, the cover varying from a few feet to 1,200 feet in thickness.

There are two mines in operation on this property, the one being entered by means of a shaft 12 ft. by 12 ft. by 330 feet in depth, and the other by means of a drift 7 ft. by 10 ft., with a slope driven off this drift on an inclination of 30 degrees for a distance of 504 feet. This slope is 8 ft. high by 7 ft. wide.

The system of working is room and pillar, entries being driven 10 ft. wide by 7 ft. high, rooms 10 ft. wide by 9 ft. high, with pillars between rooms 40 ft. wide by 30 ft. long.

The capacity of the plant is 600 tons per day of 8 hours, the mine cars holding two tons. Safety lamps of the Wolf type are used exclusively throughout the mine. The coal is hauled by gaso-line locomotives and horses on the entries and rope haulage on the slope.

West Canadian Collieries, Limited (Bellevue Nos. 1 and 2).

(Mine No. 87).

Mine Office: Blairmore.
 Head Office: 119-120 London Wall, London, E.C., England.
 Authorized Capital: \$5,600,000.00.
 President: Alphonse Wicart.
 Vice-President: Edmond Ory.
 Directors: Alphonse Wicart, Edmond Ory, Edouard deCoster, Edouard Carlier, R. Rene de LaGrange, Jean Cavois, Edouard Rasson, J. R. Tennant, Henry Maitland Kersey.
 Secretary: Andre Ghesquier.
 General Manager: Jules Charbonnier.
 Manager: W. P. Williams.
 Overmen: No. 2 mine, D. Davidson, A. Halworth. No. 1 mine, J. Roberts, O. Morgan.
 Examiners: No. 2 mine, E. Coupland, E. Roberts, S. Richards, W. Miller. No. 1 mine, H. McDonald, H. Smith, J. Radford, W. Parks, D. Hut-
 ton, J. Jackson, M. Bovio, M. Mattson.
 Mine Surveyor: W. P. Williams.
 Location of Mine: No. 2 mine, L.S. 16, Sec. 29, Tp. 7, Rge. 3, W. of 5th Mer. No. 1 mine, L.S. 10, Sec. 20, Tp. 7, Rge. 3, W. of 5th Mer.
 Area: 1,880 acres. Character of Coal: Bituminous.
 Owner of Property: West Canadian Collieries, Ltd.
 Address of Owner: 119-120 London Wall, London, E.C., England.

No. 1 seam which is being worked has an average thickness of 13 ft., with hard sandstone roof and pavement, the dip varying from 25 to 50 degrees in a general south-westerly direction, with a cover of about 180 feet in thickness.

There are two mines in operation on this property, the No. 1 mine being entered by means of a cross measure rock tunnel 7 ft. high by 14 ft. wide by 240 ft. long, driven at tipple level, and the No. 2 mine being entered by means of a cross measure rock tunnel 8 ft. high by 9 ft. wide, driven at an elevation of 300 ft. above the No. 1 tunnel.

The system of working is room and pillar, entries being driven 14 ft. wide by 8 ft. to 13 ft. high, and rooms 13½ ft. wide by 11 to 14 ft. high, with pillars between rooms 50 ft. by 60 ft.

The method of haulage is by compressed air locomotives on the entries from the chutes to the tipple. The coal from No. 2 mine is

dumped into chutes and lowered to the No. 1 tunnel, then loaded into mine cars and taken to the tippie.

The capacity of the plant is 1,500 tons per day of 8 hours, the mine cars holding 5,800 lbs. in No. 1 mine and 3,800 lbs. in No. 2 mine.

Safety lamps of the Wolf type are used by all workmen with the exception of the haulage crews, who are supplied with electric cap lamps of the Edison type.

International Coal & Coke Company, Limited. (Mine No. 88).

Mine Office: Coleman.
Head Office: Spokane, Wash., U.S.A.
Authorized Capital: \$3,000,000.00.
President: A. C. Flumerfelt.
Vice-President: H. Davidson.
Directors: A. C. Flumerfelt, H. Davidson, A. L. White, W. G. Graves, C. S. Houghton.
Secretary: W. G. Graves, Spokane, Wash., U.S.A.
Treasurer: John McKeagan.
General Manager: O. E. S. Whiteside.
Manager: David Davies.
Overman: David Davies.
Examiners: Malcolm Morrison, John Cox, E. Pavier, A. J. Brown, D. Robert.
Mine Surveyor: G. W. B. Danniells.
Location of Mine: Sec. 8, Tp. 8, Rge. 4, West of the 5th Mer.
Area: 4,410 acres. Character of Coal: Bituminous.
Owner of Property: International Coal & Coke Co., Ltd., Coleman.

There are two seams being worked on this property, the No. 2 seam being 15 ft. thick with hard roof and pavement, and the No. 4 seam 6 ft. thick with soft shale roof and hard pavement: the average dip of the seams is 33 degrees in a westerly direction.

The mine is worked on the room and pillar system, a solid pillar being left between each section of 15 rooms.

The mines are entered by means of tunnels driven in the coal from the outcrop. From No. 2 level a slope has been sunk on the No. 2 seam 7 ft. high by 10 ft. wide by 750 ft. long on an average pitch of 33 degrees, and from the foot of this slope a cross measure drift has been driven to the No. 1 seam.

The coal is hoisted up the slope by an electrically operated hoist located on the surface.

Entries are driven 10 ft. wide by thickness of seam, and rooms 10 ft. wide by thickness of seam, with pillars between rooms 50 ft. wide by 60 ft. long.

Haulage on the entries is by means of compressed air locomotives.

The plant has a capacity of 1,500 tons per day, the mine cars holding 2.3 tons.

Safety lamps of the Wolf type are used exclusively.

Burmis Coal Company. (Mine No. 153).

Mine Office: Burmis.
Head Office: Spokane, Washington, U.S.A.
Overmen: Herschel Kaye and Simon McDonald.
Mine Surveyor: R. G. Foot.
Location of Mine: Sec. 14, Tp. 7, Rge. 3, West of the 5th Mer.
Area: 482 acres. Character of Coal: Bituminous.
Owner of Property: Davenport Coal Co., Spokane, Washington, U.S.A.

Two seams were worked at this mine, the No. 2 seam 4 ft. 6 inches thick with sandstone roof and pavement, and the No. 5 seam 5 ft. 6 inches with sandstone roof and pavement.

The seams have a dip of 30 to 35 degrees in a north-westerly direction, and the cover is about 850 ft. in thickness.

The mine is entered by means of a drift 9 ft. high by 10 ft. wide, only the No. 2 mine being in operation during the year.

The rooms are driven up the pitch and are 20 ft. wide by height of seam, with pillars between rooms 35 ft. wide by 50 ft. long.

The plant had a capacity of 800 tons per day, the mine cars holding 1.8 tons.

The method of haulage is horses and gasoline locomotive.

Work during the year has consisted in extracting the pillars from the inside section. The mine is now abandoned.

West Canadian Collieries, Limited (Blairmore Mine).

(Mine No. 193).

Mine Office: Blairmore.
Head Office: London, England.
Authorized Capital: \$5,600,000.00.
President: A. Wicart.
Vice-President: E. Ory.
Directors: A. Wicart, E. Ory, E. DeCoster, E. Carlier, R. Rene de la Grange, Jean Cavois, E. Rasson, J. R. Tennant, Henry Maitland Kersey.
Secretary: Andre Ghesquier.
General Manager: Jules Charbonnier.
Manager: Raoul Green.
Overman: John Garret.
Mine Surveyor: L. P. Robert.
Location of Mine: Sec. 35, Tp. 7, Rge. 4, West of the 5th Mer.
Area: 2,240 acres. Character of Coal: Bituminous.
Owner of Property: West Canadian Collieries, Ltd., Blairmore.

The No. 2, which is the only seam worked at this mine, has an average thickness of 12 ft., with soft roof and pavement, and an average pitch of 35 degrees in a north-westerly direction.

The mine is entered by means of a drift 8 ft. high by 10 ft. wide, driven in the coal from the outcrop.

The system of working is room and pillar; rooms are driven 12 ft. wide by 5 ft. high, with pillars between rooms 30 ft. wide by 50 ft. long.

Prospecting by diamond drill has been the only work carried on in this mine during the year.

McGillivray Creek Coal & Coke Company, Limited. (Mine No. 204).

Mine Office: Coleman.
Head Office: Rossland, B. C.
Authorized Capital: \$3,000,000.00.
President: Hon. Lorne A. Campbell.
Vice-President: James A. Nowell.
Directors: Hon. Lorne A. Campbell, James A. Nowell, Henry L. Simons,
Fitz-Hugh Burns, W. E. Cullen, Jr.
Sec.-Treas.: W. E. Cullen Jr., Spokane, Wash., U.S.A.
General Manager: Hon. Lorne A. Campbell.
Manager: George Kellock.
Overman: J. O. C. McDonald.
Examiners: Thomas Parry, Alex. Scott, Harry Gates, Thomas Haines,
Thomas Thompson.
Mine Surveyor: George Kellock.
Location of Mine: S. E. $\frac{1}{4}$, Sec. 17, Tp. 8, Rge. 4, West of the 5th Mer.
Area: 640 acres. Character of Coal: Bituminous.
Owner of Property: McGillivray Creek Coal & Coke Co., Ltd., Coleman.

The No. 2, which is the only seam being worked, has an average thickness of 10 ft. with shale and conglomerate roof and coarse fire clay pavement, the average pitch being 30 degrees in a westerly direction.

The mine is entered by means of slopes, the No. 1 slope being 10 ft. high by 10 ft. wide by 300 ft. long on an inclination of 30 degrees, and the No. 2 slope being 10 ft. wide by 10 ft. high by 800 ft. long on an inclination of 30 degrees.

The system of working is by room and pillar, entries being driven 12 ft. wide by 10 ft. high, and rooms 10 ft. wide by 10 ft. high, with pillars between rooms 50 ft. wide by 60 ft. long.

The plant has a capacity of 800 tons per day, the mine cars holding 4.25 tons.

Haulage on the slope is by steam hoist and on the entries by storage battery electric locomotives.

Safety lamps of the Wolf type are used exclusively. The following improvements and additions were made to the plant during the year:

Two new boilers each of 150 H.P. of Scotch Marine type with feed water pumps for same. One 500 K.W. Turbo-Generator three phase, speed 3,600 R.P.M., 2,300 volts. One 1,200-ft. Canadian Rand Air Compressor driven by a 225 horse-power motor. Power house of re-inforced concrete, size 41' by 51'. Three 100 K.W. transformers, two 100 H.P. motors operating the hoists at Nos. 1 and 2 slopes, replacing the steam engines formerly used for this purpose.

West Canadian Collieries, Limited (Greenhill Mine).

(Mine No. 396).

Mine Office: Blairmore.
Head Office: London, England.
Authorized Capital: \$5,600,000.00.
President: A. Wicart.
Vice-President: E. Ory.
Directors: A. Wicart, E. Ory, E. DeCoster, E. Rasson, J. Tennant, R. de la Grange, Jean Cavois, Henry Maitland Kersey.
Secretary: Andre Ghesquier.

General Manager: Jules Charbonnier.
Manager: Raoul Green.
Overman: W. G. Pearson.
Examiners: W. McVey, S. Mason, W. Joyce, D. Reese, J. McAndrew,
M. Huddart.
Mine Surveyor: Raoul Green.
Location of Mine: Secs. 2 and 11, Tp. 8, Rge. 4, West of the 5th Mer.
Area: 2,400 acres. Character of Coal: Bituminous.
Name of Owner of Property: West Canadian Collieries, Ltd.
Address of Owner of Property: Blairmore, Alberta.

The No. 1 seam which is being worked is from 10 ft. to 16 ft. thick with sandstone roof and pavement, the dip being from 35 to 55 degrees in a westerly direction.

The mine is entered by drifts on the side of the mountain, the coal being lowered to tippie level by means of self-acting inclines on the surface.

The system of working is room and pillar with the angle system where the pitch is greater than 45 degrees. Entries are driven 14 ft. wide by 8 ft. high, the rooms are driven 12½ ft. wide by 10 to 14 ft. high, with pillars between rooms 30 ft. wide by 50 ft. long.

The plant has a capacity of 600 tons per day of 8 hours, the mine cars holding 2 tons.

Horses are used for haulage purposes. Safety lamps of the Wolf type are used exclusively.

The following improvements and additions have been made to the plant during the year:

One Jeffrey fan, 6 ft. dia., operated by electric motor. One frame building for wash-house equipped with 100 lockers. Snowshed built from foot of lower incline to tippie. Incline on surface from No. 3 to No. 1 level, 2,800 ft. long.

PINCHER CREEK DISTRICT.—DISTRICT NO. 2.

Thomas Tonge. (Mine No. 59).

Mine Office: Lundbreck.
Overman: Thomas Tonge.
Mine Surveyor: Norman Fraser.
Location of Mine: N. E. ¼ Sec. 26, Tp. 7, Rge. 2, West of the 5th Mer.
Area: 180 acres. Character of Coal: Lignite.
Owner of Property: Galbraith Coal Co., Ltd., Spokane, Washington, U.S.A.

The seam being worked at this mine has a thickness of 6 ft. with soft shale roof and pavement, the strata dip 40 degrees in a westerly direction, the thickness of cover being 30 ft.

This mine is located near Lundbreck on the south bank of the Old Man river, and is entered by tunnels 7 ft. high by 7 ft. wide by 80 ft. long.

The work at present consists of prospecting, the seam being faulted and dirty.

J. H. Owen. (Mine No. 295).

Mine Office: Pincher Creek.
Overman: Samuel Nicholson.
Mine Surveyor: Norman Fraser.
Location of Mine: Sec. 10, Tp. 5, Rge. 1, West of the 5th Mer.
Area: 40 acres. Character of Coal: Lignite.
Owner of Property: J. H. Owen, Pincher Creek, Alberta.

The seam which is being worked at this mine has a thickness of 9 ft. with sandstone roof and shale pavement, the strata has an average dip of 20 degrees in a southerly direction, the cover having a thickness of 300 ft.

The mine is located near Pincher Creek and is entered by means of a rock drift 6 ft. high by 7 ft. wide by 237 ft. long.

The room and pillar system of working is adopted; entries are driven 7 ft. wide by 4 to 6 ft. high, the rooms being 20 ft. wide by 7 to 10 ft. high, with pillars between rooms 20 ft. wide by 200 ft. long.

The plant has a capacity of 10 tons per day, the mine cars holding 1,000 lbs.

The output of the mine is disposed of to the settlers in the vicinity.

Link Coal Co. (Mine No. 330).

Mine Office: Pincher Creek.
Overman: Bert Hanson.
Mine Surveyor: W. L. Hamilton.
Location of Mine: Sec. 25, Tp. 5, Rge. 2, West of the 5th Mer.
Area: 960 acres. Character of Coal: Lignite.
Owner of Property: Link Coal Co., Pincher Creek, Alberta.

The seam being worked at this mine has a thickness of 7 ft. with sandy shale roof and pavement, the strata dips from 10 to 45 degrees in an easterly direction, the cover having a thickness of 300 ft.

This mine is located south-east of Pincher Creek and is entered by means of a cross measure slope 7 ft. high by 7 ft. wide by 200 ft. long on an inclination of 20 to 33 degrees.

Prospecting work only is being done at this mine.

Herschel Kaye. (Mine No. 140).

Mine Office: Maycroft.
Overman: Herschel Kaye.
Mine Surveyor: W. L. Hamilton.
Location of Mine: N.E. $\frac{1}{4}$ of Sec. 11, Tp. 10, Rge. 2, West of the 5th Mer.
Area: 40 acres. Character of Coal: Lignite.
Owner of Property: Herschel Kaye, Maycroft, Alberta.

No work has been done at this mine during the year and it is now abandoned.

John Davies. (Mine No. 452).

Mine Office: Pincher Creek.
Overman: John Davies.
Mine Surveyor: G. A. Lavoie.
Location of Mine: Sec. 17, Tp. 5, Rge. 1, West of the 5th Mer.
Area: 160 acres. Character of Coal: Lignite.
Owner of Property: John Davies: Pincher Creek, Alberta.

The seam which is being worked at this mine has a thickness of 7 ft. with sandstone roof and shale pavement, the strata dips 15 degrees in a southerly direction, the cover being 15 ft. in thickness.

The mine is located south-east of Pincher Creek and is entered by means of a drift 7 ft. high by 8 ft. wide.

The room and pillar system of working is adopted, entries are driven 8 ft. wide by 7 ft. high, the rooms being 8 ft. wide by 7 ft. high, with pillars between rooms 35 ft. wide by 50 ft. long.

Very little work has been done at this mine during the year and it is now abandoned.

Peter McPherson. (Mine No. 455).

Mine Office: Fishburn.
Location of Mine: S.E. $\frac{1}{4}$ Sec. 3, Tp. 4, Rge. 28, West of the 4th Mer.
Area: 60 acres. Character of Coal: Lignite.
Owner of Property: Daniel Fitzpatrick, Fishburn, Alberta.

The seam of coal which is being worked has a thickness of 3 ft. with sandstone roof and shale pavement, the strata dips 30 degrees in a westerly direction, the cover being 30 ft. in thickness.

This mine is located near Fishburn and is entered by means of a slope 4 ft. high by 5 ft. wide by 50 ft. long driven on the pitch of the seam.

The room and pillar system of working is adopted, entries being driven 5 ft. wide by 3 ft. high, the rooms being 15 ft. wide by 3 ft. high, with pillars between rooms 20 ft. wide by 30 ft. long.

No work has been done during the year.

John Morris. (Mine No. 606).

Mine Office: Lundbreck.
Overman: John Morris.
Mine Surveyor: G. A. Lavoie.
Location of Mine: N.W. $\frac{1}{4}$ Sec. 26, Tp. 7, Rge. 2, West of the 5th Mer.
Area: 40 acres. Character of Coal: Lignite.
Owner of Property: Breckenridge & Lund, Lundbreck, Alberta.

The seam of coal which is being worked has a thickness of 6 ft. with shale roof and pavement, the strata dips 60 degrees in a westerly direction, the cover having an average thickness of 50 ft.

This mine is located near Lundbreck and is entered by drifts 6 ft. wide by 7 ft. high.

The room and pillar system of working is adopted, entries are driven 6 ft. wide by 7 ft. high, the rooms being 6 ft. high by 10 ft. wide, with pillars between rooms 30 ft. wide by 50 ft. long.

The mine has a capacity of 10 tons per day, the output being disposed of locally.

Very little work has been done at this mine during the year and it is now abandoned.

LETHBRIDGE DISTRICT.—DISTRICT No. 3.

Department of Natural Resources, Canadian Pacific Railway Company. (Mine No. 3).

Mine Office: Lethbridge.
Head Office: Montreal, Quebec.
President: Lord Shaughnessy, K.C.V.O.
Vice-President: George Bury.
Directors: Lord Shaughnessy, Sir Thomas Skinner, R. B. Angus, George Bury, Hon. James Dunsmuir, F. T. Meighen, Sir Herbert S. Holt, Charles R. Hosmer, Hon. Robert McKay, W. D. Matthews, David McNicol, A. M. Nanton, Sir E. B. Osler, J. K. L. Ross, E. W. Beattie.
Secretary: W. R. Baker.
Treasurer: H. E. Suckling.
General Superintendent: Lewis Stockett.
Manager: Robert Livingstone.
Mine Surveyor: W. Kellett.

No. 3 Mine.

Overman: George Taylor.
Examiners: R. Scott, J. T. Parks, T. Worthington.
Location of Mine: N.W.¼, Sec. 6, Tp. 9, Rge. 21, West of the 4th Mer.
Area: 6,000 acres. Character of Coal: Lignite.

No. 6 Mine.

Overmen: John C. Livingstone, George Coutts.
Examiners: G. W. Briarly, David Coutts, S. A. Crabb, W. Crawford, Robert Clark, J. Chaplow, Robert Draper, R. Horne, J. Millar, J. McGowan, J. Rae, R. Tennant.
Location of Mine: N.E.¼, Sec. 18, Tp. 9, Rge. 21, West of the 4th Mer.
Area: 12,000 acres. Character of Coal: Lignite.
Owner of Property: Canadian Pacific Railway Co.
Address of Owner: Lethbridge, Alberta.

The Lethbridge seam which is being worked has a thickness of 4 ft. 4 inches with shale roof and pavement, and dipping 1 degree in a north-westerly direction, the cover varying from 200 to 400 feet.

The mines are entered by shafts, the No. 3 shaft being 8 ft. wide by 15 ft. long by 300 ft. deep, and the No. 6 shaft 19 ft. long by 18 ft. wide by 400 ft. deep.

The plant at No. 3 mine has a daily capacity of 800 tons, the mine cars holding 2,000 lbs. The plant at No. 6 mine has a daily capacity of 1,600 tons, the mine cars holding 2,500 lbs.

The mines are worked on the room and pillar system, entries being driven 8 ft. wide by 6 ft. high, rooms 18 ft. wide by 5 ft. 6 inches high with pillars between rooms 18 ft. wide by 50 ft. long.

Haulage in both mines is by endless rope on main roads and by horses on the side entries.

Electric cap lamps of the Wico type are used by all workmen in the No. 6 mine except machine men, who are supplied with Ceag electric hand lamps.

Open lights are used in No. 3 mine.

The timbers at the bottom of No. 6 shaft have been replaced by steel girders.

A new shaft 8 ft. wide by 11½ ft. long has been sunk and connected with the workings of No. 6 mine. This will be used as an airshaft and travelling way for the workmen.

The Grace Coal Mine. (Mine No. 54).

(Formerly operated by James Ashcroft).

Mine Office: Lethbridge.

Overman: C. S. Donaldson.

Mine Surveyor: Alfred Davis.

Location of Mine: S.W.¼ Sec. 35, Tp. 8, Rge. 22, West of the 4th Mer.

Area: 160 acres. Character of Coal: Lignite.

Owner of Property: A. B. Grace, Lethbridge, Alberta.

The Lethbridge seam, which is the only one being worked, is 4 ft. 6 in. thick with shale roof and pavement, the average dip is 1% in a north-westerly direction and the cover is 240 ft. in thickness.

The mine, which is entered by drifts into the bank on the west side of river from Lethbridge, is worked on the room and pillar system, entries being driven 7 ft. wide by 5 ft. 2 inches high, the rooms 16 ft. wide by 4 ft. 4 inches high, with pillars between rooms 14 ft. wide by 60 ft. long.

The plant has a capacity of 50 tons per day, the mine cars holding 1,200 lbs.

Haulage is done by horses from rooms to the tippie.

A ferry has been installed to convey the coal across the river and is operated by a steam hoist located on the east bank. It is the intention to install during the coming spring an aerial tramway to convey the coal from the mine to the prairie level on the Lethbridge side.

A wash-house 18' long by 9' wide by 8' 6" high has been built for the use of the employees.

John Rollingson. (Mine No. 55).

Mine Office: Lethbridge.

Overman: John Rollingson.

Mine Surveyor: James F. Hamilton.

Location of Mine: S.E.¼ Sec. 18, Tp. 7, Rge. 21, West of the 4th Mer.

Area: 160 acres. Character of Coal: Lignite.

Owner of Property: George F. Russell, Fort Erie, Ontario.

The Lethbridge seam which is being worked has an average thickness of 3 ft. 3 inches with shale roof and pavement, and has a dip of 2% in a south-westerly direction, with a cover 80 ft. in thickness.

The mine is entered by a drift 5 ft. high by 4½ ft. wide. The system of working is room and pillar, entries being driven 4½ ft.

wide by 5 ft. high, the rooms being 12 ft. wide by 3 ft. 6 inches high, with pillars between rooms 10 ft. wide by 90 ft. long.

The mine produces 8 tons per day, the mine cars holding 500 lbs.

North American Collieries, Limited. (Mine No. 174).

(Formerly Canadian Coal & Coke Co., Ltd.)

Mine Office: Coalhurst.

Head Office: 1021 Transportation Building, Montreal, P.Q.

Authorized Capital: \$1,000,000.00.

President: Hon. H. A. Lovett, K.C.

Vice-Presidents: Hon. Robert MacKay, Parmely W. Herrick.

Directors: Hon. N. Curry, H. A. Lovett, K.C., Hon. Robert MacKay, Parmely W. Herrick, R. M. Ballantyne, J. W. Pyke, J. B. Ferguson, J. N. Greenshields, K.C.

Sec.-Treas.: P. F. Brown. Assistant: S. T. Mains.

General Superintendent: Norman C. Pitcher.

Manager: Joseph B. DeHart.

Overman: John D. Keith.

Examiners: W. McDonald, R. Heap, J. Ferguson, J. Steel, J. Murray, W. D. McMillan, Hugh Evans, Peter Hutchison, R. W. Hughes.

Mine Surveyor: Owen L. Puckett.

Location of Mine: Sec. 21, Tp. 9. Rge. 22, West of the 4th Mer.

Area: 9,360 acres. Character of Coal: Lignite.

Owner of Property: North American Collieries, Ltd.

Address of Owner: 1021 Transportation Building, Montreal, P.Q.

The Lethbridge, which is the only seam being worked, has an average thickness of 4 ft. 4 inches with shale roof and pavement, the dip being 2 degrees in a north-westerly direction, and the cover is 580 ft. thick.

The mine is entered by shafts 21 ft. 2 inches long by 17 ft. 6 inches wide by 580 ft. deep.

The system of working is room and pillar. Entries are driven 8 ft. wide by 6 ft. high, the rooms being 30 ft. wide by 4½ ft. high with pillars between rooms 40 ft. wide by 175 ft. long.

The plant has a capacity of 1,200 tons per day, the mine cars holding 3,000 lbs.

The method of haulage is by endless rope operated by a 30 H.P. electric motor.

Safety lamps of the Wolf type and electric cap lamps of the Edison type are used for lighting purposes.

A telephone system has been installed connecting the surface with the underground workings.

50 new mine cars have been added to the equipment.

City of Lethbridge. (Mine No. 192).

Mine Office: Lethbridge.

Overman: Alfred Davis.

Mine Surveyor: Alfred Davis.

Location of Mine: L.S. 10, Sec. 36, Tp. 8, Rge. 22, West of the 4th Mer.

Area: 40 acres. Character of Coal: Lignite.

Owner of Property: City of Lethbridge, Lethbridge.

The Lethbridge seam which is being worked has a thickness of 4 ft. 4 in. with shale roof and pavement, the dip is 1% in a north-westerly direction and the cover being 200 ft. thick.

The mine is entered by drifts from the bank of the river on the Lethbridge side.

The system of working is room and pillar, entries are driven 6 ft. 3 inches high by 7 ft. wide, the rooms are 16 ft. wide by 4 ft. 2 inches high, with pillars between rooms 14 ft. wide by 55 ft. long.

The mine produces 40 tons per day, the mine cars holding 1,600 lbs. The total output of the mine is used by the city of Lethbridge for the power plant and the city offices.

New Barnes Coal Mine Company. (Mine No. 203).

Mine Office: Royal View.
 Secretary: A. E. Dupen.
 General Manager: A. E. Dupen.
 Overman: Mike Larschuk.
 Mine Surveyor: Alfred Davis.
 Location of Mine: L.S. 9, Sec. 31, Tp. 9, Rge. 21, West of the 4th Mer.
 Area: 80 acres. Character of Coal: Lignite.
 Owner of Property: A. E. Dupen, Royal View.

The Lethbridge, which is the only seam worked, has an average thickness of 4 ft. with shale roof and pavement, the dip is 5% in a south-westerly direction, the cover being 200 ft. in thickness.

The mine is entered by means of a drift in a coulee.

The system of working being room and pillar, entries are driven 7 ft. wide by 5½ ft. high, the rooms being 14 ft. wide by 4 ft. high with pillars between rooms 24 ft. wide by 60 ft. long.

The mine produces 35 tons per day, the mine cars holding 1,300 lbs.

Chinook Coal Company Limited. (Mine No. 247).

Mine Office: Commerce.
 Head Office: Toronto, Canada.
 Authorized Capital: \$3,000,000.00.
 President: W. A. Wood.
 Vice-President: Miller Lash.
 Directors: W. A. Wood, Miller Lash, Robert Cassels, H. A. McCallum,
 Cyrus B. Birge, C. R. Somerville, C. Cook.
 Secretary-Treasurer: W. de B. Daly.
 General Manager: A. H. Reid.
 Manager: A. H. Reid.
 Overman: Peter Jones.
 Examiners: George Loxton, John Loxton, David Phillips.
 Mine Surveyor: H. R. Brown.
 Location of Mine: L.S. 7, Sec. 12, Tp. 10, Rge. 22, West of the 4th Mer.
 Area: 8,300 acres. Character of Coal: Lignite.
 Owner of Property: Chinook Coal Company, Limited, Lethbridge, Alberta.

The Lethbridge, which is the only seam worked, has an average thickness of 4 ft. 6 in. with coal and shale roof and pavement, the dip is 4 degrees in a westerly direction, the cover being 440 ft. in thickness.

The mine is entered by means of shafts 8 ft. 6 in. wide by 17 ft. long by 440 ft. deep.

The system of working is room and pillar, entries are driven 8 ft. wide by 5 ft. 6 in. high, the rooms being 16 ft. wide by 5 ft. high, with pillars between rooms 20 ft. wide by 50 ft. long.

The plant has a capacity of 1,000 tons per day, the mine cars holding 3,000 lbs. Hoisting is done by means of self-dumping cages.

George Slockett. (Mine No. 276).

Mine Office: Diamond City.

Overman: George Slockett.

Mine Surveyor: C. C. Richards.

Location of Mine: L.S. 13, Sec. 9, Tp. 10, Rge. 21, West of the 4th Mer.

Area: 80 acres. Character of Coal: Lignite.

Owner of Property: George Slockett, Diamond City.

The seam of coal being worked has a thickness of 3 ft. with 4 inches of dirt in the centre, the roof is clay with shale pavement, the strata is practically level, the cover being 100 ft. in thickness.

The mine is located near Diamond City and is entered by drifts 5 ft. high by 6 ft. wide.

The room and pillar system of working is adopted, entries being driven 6 ft. wide by 5 ft. high, the rooms 10 ft. wide by 4 ft. high, with pillars between rooms 20 ft. wide by 50 ft. long.

The coal is hoisted from the mine to the tippie over a surface incline by means of an 8 H.P. gasoline engine.

The plant has a capacity of 15 tons per day, the mine cars holding 1,000 lbs.

Michael Molloy. (Mine No. 395).

Mine Office: Picture Butte.

Overman: E. A. Landry.

Mine Surveyor: C. C. Richards.

Location of Mine: N.W. ¼ Sec. 27, Tp. 10, Rge. 21, West of the 4th Mer.

Area: 60 acres. Character of Coal: Lignite.

Owner of Property: Michael Molloy, Picture Butte.

The Lethbridge seam which is being worked, has a thickness of 3 ft. 4 in. with shale roof and pavement, the dip being 5% in a westerly direction, the cover has an average thickness of 180 ft.

The mine is entered by means of drifts in the bank at the bottom of a coulee, the coal being hoisted to the tippie by an 8 H.P. gasoline engine up a surface incline 600 ft. long on an inclination of 30 degrees.

Room and pillar work is the system adopted, entries being driven 6 ft. wide by 6 ft. high, the rooms 14 ft. wide by 3 ft. 8 inches high with pillars 16 ft. wide by 50 ft. long.

C. S. Donaldson. (Mine No. 605).

Mine Office: Commerce.
Overman: C. S. Donaldson.
Location of Mine: N.W.¼ Sec. 16, Tp. 10, Rge. 21, West of the 4th Mer.
Area: 70.6 acres. Character of Coal: Lignite.
Owners of Property: C. S. Donaldson and J. J. Johnson, 414 13th St., Lethbridge.

The seam has a thickness of 3 ft. 6 inches with soft shale roof and clay pavement, the strata is practically level, the cover being 100 ft. in thickness.

This mine is located 3½ miles north-east of Commerce, and is entered by a drift 6 ft. high by 6 ft. wide, prospecting work only being done. The mine is now abandoned, the seam not having proved of commercial value.

Stephen Harrison. (Mine No. 638).

Mine Office: Lethbridge.
Overman: Stephen Harrison.
Mine Surveyor: Stephen Harrison.
Location of Mine: S.W.¼ Sec. 35, Tp. 8, Rge. 22, West of the 4th Mer.
Area: 20 acres. Character of Coal, Lignite.
Owner of Property: Stephen Harrison, Lethbridge.

The seam which was worked has a thickness of 2 ft. 6 inches with shale roof and clay pavement, the strata is practically level, the cover being 200 ft. in thickness.

This mine is located near Lethbridge, and is entered by a drift 4 ft. 6 inches high by 5 ft. wide driven in 20 ft. Prospecting work only was done and the mine is now abandoned, the seam not proving of commercial value.

Gerhard Erickson. (Mine No. 674).

Mine Office: Diamond City.
Overman: Jos. Bennadette.
Location of Mine: L.S. 4, Sec. 16, Tp. 10, Rge. 21, West of the 4th Mer.
Area: 40 acres. Character of Coal: Lignite.
Owner of Property: G. Erickson, Diamond City.

The seam being worked at this mine has a thickness of 3 ft. with clay roof and shale pavement, the strata is perfectly level, the cover having a thickness of 100 ft.

The mine is located in a coulee north-east of Diamond City, and is entered by drifts 6 ft. wide by 5 ft. high.

The system of working adopted is room and pillar, entries being driven 6 ft. wide by 5 ft. high, the rooms 10 ft. wide by 3 ft. high, with pillars between rooms 20 ft. wide by 50 ft. long.

The output is 10 tons per day, the mine cars holding 1,000 lbs.

Lethbridge Land and Coal Company. (Mine No. 676).

Mine Office: Lethbridge.
General Manager: Hugh Taylor.
Overman: Thomas Whitelaw.
Location of Mine: S.W. $\frac{1}{4}$ Sec. 12, Tp. 9, Rge. 22, West of the 4th Mer.
Area: 40 acres. Character of Coal: Lignite.
Owner of Property: Lethbridge Land & Coal Co., Lethbridge.

The seam which is being worked at this mine is 4 ft. 6 inches in thickness with shale roof and bone coal pavement, the strata dips 2% in a north-westerly direction, the cover being 240 ft. in thickness.

The mine is located on the west side of the river from Lethbridge. Prospecting work only is being done.

MAGRATH DISTRICT.—DISTRICT No. 4.

Edward Oliver. (Mine No. 56).

Mine Office: Magrath.
Overman: Louis Oliver.
Mine Surveyor: James F. Hamilton.
Location of Mine: S.E. $\frac{1}{4}$ Sec. 7, Tp. 7, Rge. 21, West of the 4th Mer.
Area: 54 acres. Character of Coal: Lignite.
Owner of Property: Thomas H. Baker.
Address of Owner: Magrath, Alberta.

The Lethbridge seam which is being worked is 3 ft. 3 inches thick, with coal roof and shale pavement, and lies horizontal with 120 feet of cover.

The mine is entered by a drift 5 ft. high by 6 ft. wide, driven in from the bottom of a coulee.

The coal is hoisted to the tippie up the side of coulee by a horse gin, the inclination of the slope being 38 degrees.

The mine is operated on the room and pillar system, entries are driven 6 ft. wide by 5 ft. high, the rooms are 14 ft. wide by 4 ft. high with pillars between rooms 10 ft. wide by 60 ft. long.

The plant has a capacity of 20 tons per day, the mine cars holding 700 lbs.

Open lights are used throughout the mine.

Francis Gillespie. (Mine No. 162).

Mine Office: Magrath.
Overman: Francis Gillespie.
Mine Surveyor: James F. Hamilton.
Location of Mine: S.W. $\frac{1}{4}$ Sec. 1, Tp. 7, Rge. 22, West of the 4th Mer.
Area: 205 acres. Character of Coal: Lignite.
Owners of Property: Levi Parker, P. Woodruff, J. L. Gibb.
Address of Owners: Magrath.

The Lethbridge seam which is being worked is 34 inches thick with shale roof and pavement, having a dip of 2 degrees in a south-easterly direction, with 60 ft. of cover.

The mine is entered by means of a drift 5½ ft. wide by 5½ ft. high.

The system of working is room and pillar. Entries are driven $5\frac{1}{2}$ ft. by $5\frac{1}{2}$ ft., the rooms are 16 ft. wide by 3 ft. 10 inches high, with pillars between rooms 14 ft. wide by 60 ft. long.

The output of the mine averages 20 tons per day, the mine cars holding 1,000 lbs.

Open lights are used throughout the mine.

William H. McIntyre. (Mine No. 405).

Mine Office: Magrath.

Overman: George Martin.

Mine Surveyor: James F. Hamilton.

Location of Mine: S.W. $\frac{1}{4}$ Sec. 24, Tp. 3, Rge. 22, West of the 4th Mer.

Area: 160 acres. Character of Coal: Lignite.

Owner of Property: William H. McIntyre.

Address of Owner: Magrath, Alberta.

The Magrath, which is the only seam worked, is 4 ft. thick with shale roof and clay pavement, having a dip of 1.3 degrees in a north-westerly direction, with a cover of 70 ft.

The mine is entered by a drift 6 ft. high by $6\frac{1}{2}$ ft. wide.

The system of working is room and pillar. Entries are driven $6\frac{1}{2}$ ft. by 6 ft., the rooms are 10 ft. wide by 6 ft. high, with pillars between rooms 20 ft. wide by 40 ft. long.

The output of the mine averages 8 tons per day, the mine cars holding 1,000 lbs.

Open lights are used throughout the mine.

MILK RIVER DISTRICT.—DISTRICT No. 5.

Edward Weaver. (Mine No. 179).

Mine Office: Milk River.

Overman: Edward Weaver.

Mine Surveyor: James Hargreaves.

Location of Mine: W. $\frac{1}{2}$ Sec. 31, Tp. 2, Rge. 15, West of the 4th Mer.

Area: 320 acres. Character of Coal: Lignite.

Owner of Property: Joseph Oborn, Milk River.

The seam which is being worked at this mine has a thickness of 4 ft. with shale roof and clay pavement, the strata is level, the cover being 75 ft. in thickness.

This mine is located near Milk River, and is entered by means of drifts $5\frac{1}{2}$ ft. high by 6 ft. wide.

The system of working adopted is room and pillar. Entries are driven 6 ft. wide by $5\frac{1}{2}$ ft. high, the rooms being 35 ft. wide by 4 ft. high, with pillars between rooms 10 ft. wide by 50 ft. long.

The output of the mine, which is 30 tons per day, is disposed of to the settlers in the vicinity, the mine cars holding 1,000 lbs.

Carl E. Hollander. (Mine No. 271).

Mine Office: Milk River.
Overman: Thomas P. Logan.
Mine Surveyor: James Hargreaves.
Location of Mine: S.W. $\frac{1}{4}$ Sec. 26, Tp. 2, Rge. 16, West of the 4th Mer.
Area: 160 acres. Character of Coal: Lignite.
Owner of Property: Carl E. Hollander, Milk River, Alberta.

The seam which is being worked has a thickness of 32 inches, with hard roof and soft shale pavement, the strata is practically level, the cover having a thickness of from 20 to 70 ft.

This mine is located near Milk River and is entered by means of a shaft 7 ft. 8 inches long by 5 ft. wide by 23 ft. deep, the coal being hoisted by means of a horse gin.

The room and pillar system of working is adopted. Entries are driven 6 ft. wide by 4½ ft. high, the rooms being 14 ft. wide by 3 ft. 6 inches high, with pillars between rooms 10 ft. wide by 40 ft. long.

The mine has a capacity of 20 tons per day, the mine cars holding 1,000 lbs.

A hoisting shaft 7 ft. 8 inches long by 5 ft. wide by 23 ft. deep has been sunk during the year.

The coal is disposed of to the settlers in the vicinity.

Daniel G. McKay. (Mine No. 279).

Mine Office: Milk River.
Overman: Daniel G. McKay.
Mine Surveyor: James Hargreaves.
Location of Mine: L.S. 1, Sec. 1, Tp. 3, Rge. 16, West of the 4th Mer.
Area: 20 acres. Character of Coal: Lignite.
Owner of Property: Daniel G. McKay, Milk River, Alberta.

The seam which is being worked has a thickness of 33 inches, with shale roof and soft shale pavement, the strata is practically level, the cover having a thickness of 40 ft.

This mine is located near Milk River, and is entered by means of drifts 5 ft. 6 inches high by 5 ft. 6 inches wide.

The system of working adopted is room and pillar. Entries are driven 5 ft. 6 inches wide by 5 ft. 6 inches high, the rooms being 14 ft. wide by 5 ft. 6 inches high, with pillars between rooms 12 ft. wide by 60 ft. long.

The mine is worked on a small scale for the supply of settlers in the vicinity, the capacity of the plant being 25 tons per day, the mine cars holding 1,000 lbs.

Miskulene & Wakusich. (Mine No. 308).

Mine Office: Lucky Strike.
Overman: Mike Miskulene.
Mine Surveyor: James Hargreaves.
Location of Mine: S.E. $\frac{1}{4}$ Sec. 10, Tp. 3, Rge. 11, West of the 4th Mer.
Area: 97 acres. Character of Coal: Lignite.
Owner of Property: Henry B. Hughson, Lucky Strike, Alberta.

The seam which is being worked has a thickness of 3 ft. 4 inches with shale roof and clay pavement, the strata is practically level, the cover having a thickness of 100 ft.

This mine is located near Lucky Strike, and is entered by means of a drift 5 ft. 2 inches high by 7 ft. wide.

The room and pillar system of working is adopted. Entries are driven 7 ft. wide by 5 ft. 2 inches high, the rooms being 14 ft wide by 4 ft. 6 inches high, with pillars between rooms 8 ft. wide by 50 ft. long.

The plant has a capacity of 12 tons per day, the mine cars holding 500 lbs. The output is disposed of to the settlers in the vicinity.

Evan T. Davies. (Mine No. 381).

Mine Office: Lucky Strike.

Overman: Evan T. Davies.

Mine Surveyor: James Hargreaves.

Location of Mine: L.S. 13, Sec. 6, Tp. 3, Rge. 11, West of the 4th Mer.

Area: 20 acres. Character of Coal: Lignite.

Owner of Property: Arthur Bembridge, Lucky Strike, Alberta.

The seam which is being worked has a thickness of 2 ft. 6 inches, with shale roof and clay pavement, the strata has a dip of 1 degree in a northerly direction, the cover being 60 ft. in thickness.

This mine is located near Lucky Strike, and is entered by means of drifts 6 ft. high by 6 ft. wide.

The room and pillar system of working is adopted. Entries are driven 6 ft. wide by 6 ft. high, the rooms are 12 ft. wide by 30 ft. long.

The mine produces about 10 tons per day, which is disposed of in the vicinity to the settlers, the mine cars holding 500 lbs.

William S. Abel. (Mine No. 390).

Mine Office: Kippenville.

Overman: George Bennie.

Location of Mine: S.W. $\frac{1}{4}$ Sec. 1, Tp. 3, Rge. 12, West of the 4th Mer.

Area: 160 acres. Character of Coal: Lignite.

Owner of Property: William S. Abel, Kippenville, Alberta.

The seam has a thickness of 4 ft. 4 inches, with soft sandstone roof and clay pavement, the strata is practically level, the cover having a thickness of 50 ft.

This mine is located near Kippenville, and is entered by means of drifts 6 ft. high by 6 ft. wide.

The system of working adopted is room and pillar. Entries are driven 6 ft. wide by 6 ft. high, the rooms being 18 ft. wide by 5 ft. 7 inches high, with pillars between rooms 12 ft. wide by 50 ft. long.

Very little work has been done during the year and the mine is now abandoned, the main entry having caved.

Philip Goodie. (Mine No. 421).

Mine Office: Groton.

Overman: Peter Swanson.

Location of Mine: L.S. 10, Sec. 10, Tp. 3, Rge. 11, West of the 4th Mer.

Area: 22½ acres.

Character of Coal: Lignite.

Owner of Property: Philip Goodie, Groton, Alberta.

The seam being worked has a thickness of 3 ft. 8 inches, with sandstone roof and clay pavement, the strata dips 1 degree in a north-westerly direction, the cover having a thickness of 40 ft.

This mine is located 30 miles south-east of Foremost, and is entered by means of slopes 5 ft. high by 6 ft. wide by 47 ft. long, on an inclination of 28 degrees.

The system of working adopted is room and pillar. Entries are driven 6 ft. wide by 4 ft. high, the rooms being 14 ft. wide by 4 ft. high, with pillars between rooms 10 ft. wide by 50 ft. long.

The mine produces an average output of 10 tons per day, which is disposed of to the settlers in the vicinity, the mine cars holding 1,000 lbs.

Willis H. Braley. (Mine No. 481).

Mine Office: Warner.

Location of Mine: L.S. 4, Sec. 16, Tp. 4, Rge. 16, West of the 4th Mer.

Area: 20 acres.

Character of Coal: Lignite.

Owner of Property: Willis H. Braley, Warner, Alberta.

The seam which was worked has a thickness of 3 ft., with soft sandstone roof and clay pavement, the strata is practically level, the cover having a thickness of 60 feet.

This mine is located east of Warner, and is entered by means of a drift 5 ft. high by 6 ft. wide.

The room and pillar system of working is adopted. Entries are driven 6 ft. wide by 5 ft. 6 inches high, the rooms being 16 ft. wide by 4 ft. high, with pillars between rooms 14 ft. wide by 50 ft. long.

Very little work has been done at this mine during the year and it is now abandoned.

Evan T. Davies. (Mine No. 641).

Mine Office: Milk River.

Overman: Evan T. Davies.

Mine Surveyor: James Hargreaves.

Location of Mine: E.½, L.S. 4, Sec. 35, Tp. 2, Rge. 16, West of the 4th Mer.

Area: 20 acres.

Character of Coal: Lignite.

Owner of Property: Evan T. Davies, Milk River, Alberta.

The work at this mine consisted of sinking a shaft 5 ft. wide by 8 ft. 6 inches long by 80 ft. deep to the coal.

The seam of coal at this point proved dirty and not saleable, and the mine is now abandoned.

F. A. Swanson. (Mine No. 642).

Mine Office: Etzikom.

Overman: Peter P. Jennings.

Location of Mine: S.½, L.S. 5, Sec. 22, Tp. 2, Rge. 7, West of the 4th Mer.

Area: 20 acres.

Character of Coal: Lignite.

Owners of Property: F. A. Swanson, Peter P. Jennings, Etzikom, Alberta.

The seam which is being worked has a thickness of 4 ft. 6 inches, with sandstone roof and clay pavement, the strata is practically horizontal, the cover being 110 ft. in thickness.

This mine is located near Etzikom, and is entered by means of drifts 5½ ft. high by 7 ft. wide.

Operations are conducted on a small scale, only entries being driven.

A wooden tippie with a chute having a storage capacity of 20 tons has been built. The output is disposed of to the settlers in the vicinity.

Charles L. Kemmis. (Mine No. 644).

Mine Office: Kippenville.

Overman: George Bennie.

Location of Mine: S.W.¼ Sec. 1, Tp. 3, Rge. 12, West of the 4th Mer.

Area: 160 acres.

Character of Coal: Lignite.

Owner of Property: William S. Abel, Kippenville, Alberta.

The seam being worked has a thickness of 4 ft. 4 inches, with soft sandstone roof and clay pavement, the strata is practically level, the cover having a thickness of 50 feet.

This mine is located near Kippenville, 25 miles south-west of Foremost, and is entered by means of a slope 6 ft. high by 6 ft. wide by 70 ft. long, on an inclination of 14 degrees.

The room and pillar system of working is adopted. Entries are driven 6 ft. wide by 6 ft. high, the rooms being 18 ft. wide by 5 ft. 6 inches high, with pillars between rooms 12 ft. wide by 50 ft. long.

The capacity of the mine is 10 tons per day, the mine cars holding 1,000 lbs. The output is disposed of to settlers in the vicinity.

Frank Brisco. (Mine No. 647).

Mine Office: Hillsprings.

Overman: Frank Brisco.

Location of Mine: S.E.¼ Sec. 4, Tp. 4, Rge. 27, West of the 4th Mer.

Area: 15 acres.

Character of Coal: Lignite.

Owner of Property: William Garner, Hillsprings, Alberta.

The seam which is being worked has a thickness of 4 ft., with hard rock roof and pavement, the strata has a dip of 42 degrees in a north-westerly direction, the cover having an average thickness of 100 feet.

This mine is located 15 miles north-west of Cardston, and is entered by means of a drift 6 ft. high by 5 ft. wide.

The room and pillar system of working is adopted. Entries are driven 5 ft. wide by 6 ft. high, the rooms being 12 ft. wide by 4 ft. high, with pillars between rooms 30 ft. wide by 50 ft. long.

The output of the mine, which is 15 tons per day, is disposed of to the settlers in the vicinity, the mine cars holding 1,000 lbs.

James Moody. (Mine No. 649).

Mine Office: Gahern.

Overman: James Moody.

Location of Mine: L.S. 16, Sec. 22, Tp. 2, Rge. 7, West of the 4th Mer.

Area: 40 acres. Character of Coal: Lignite.

Owner of Property: James Moody, Gahern, Alberta.

The seam being worked has a thickness of 5 ft., with sandstone roof and clay pavement, the strata is practically level, the cover having a thickness of 110 ft.

This mine is located 40 miles south-east of Foremost, and is entered by means of a drift 6 ft. high by 6 ft. wide, driven in from the bottom of a coulee. The coal is hauled to the tippie by a horse gin over a surface incline 180 ft. long on an inclination of 26 degrees.

The system of working adopted is room and pillar. Entries are driven 6 ft. wide by 6 ft. high, the rooms being 16 ft. wide by 5 ft. high, with pillars between rooms 12 ft. wide by 45 ft. long.

The capacity of the plant is 10 tons per day, the mine cars holding 1,000 lbs.

The output is disposed of to the settlers in the vicinity.

Frank May. (Mine No. 650).

Mine Office: Beazer.

Overman: Charles Simone.

Location of Mine: L.S. 9, Sec. 6, Tp. 2, Rge. 26, West of the 4th Mer.

Area: 20 acres. Character of Coal: Lignite.

Owner of Property: Frank May, Beazer, Alberta.

The seam which is being worked has a thickness of 3 ft., with hard rock roof and pavement, the strata dips 45 degrees in a westerly direction, the cover being 165 ft. in thickness.

This mine is located 10 miles south-west of Cardston, and is entered by means of a drift 5 ft. high by 5 ft. wide by 205 ft., driven across the measures.

Prospecting work only is being done, the seam not having proved profitable enough to open up.

William H. Crawford. (Mine No. 658).

Mine Office: Boundary Creek.

Overman: Erurinio Prizzo.

Location of Mine: S. $\frac{1}{2}$, L.S. 1, Sec. 15, Tp. 1, Rge. 26, West of the 4th Mer.

Area: 20 acres. Character of Coal: Lignite.

Owner of Property: William H. Crawford, Boundary Creek, Alberta.

The seam which is being worked has a thickness of 3 ft., with hard rock roof and pavement, the strata dips 45 degrees in a westerly direction, the cover being from 10 to 140 ft. in thickness.

This mine is located 15 miles south-west of Cardston, and is entered by means of a slope 4 ft. high by 5 ft. wide by 130 ft. long, on an inclination of 45 degrees.

The mine is being developed, the entries being 6 ft. wide by 3 ft. high.

The output is 10 tons per day and is disposed of locally to the settlers. The mine cars hold 1,000 lbs.

Frank May. (Mine No. 668).

Mine Office: Beazer.

Location of Mine: L.S. 3, Sec. 7, Tp. 2, Rge. 26, West of the 4th Mer.

Area: 40 acres. Character of Coal: Lignite.

Owner of Property: Frank May, Beazer, Alberta.

The seam of coal which is being worked has a thickness of 7 ft., with soft shale roof and clay pavement, the strata has a dip of 45 degrees in a westerly direction, the cover being 165 ft. in thickness.

This mine is located near Beazer, 9 miles south-west of Cardston, and is entered by means of a drift 6 ft. 6 inches high by 8 ft. wide.

The present output is 10 tons per day and is disposed of to the settlers in the vicinity.

TABER DISTRICT.—DISTRICT NO. 6.

Regal Collieries, Limited. (Mine No. 82).

Mine Office: Taber.

Head Office: Detroit, Mich, U.S.A.

Authorized Capital: \$500,000.00.

President: William A. Aubin.

Vice-President: William E. Bullock.

Directors: W. A. Aubin, John C. Frost, W. E. Bullock.

Sec.-Treas.: John C. Frost.

General Manager: W. E. Bullock.

Manager: Emile Leblanc.

Mine Surveyor: Emile Leblanc.

Location of Mine: Sec. 8, Tp. 10, Rge. 16, West of the 4th Mer.

Area: 640 acres. Character of Coal: Lignite.

Owner of Property: Regal Collieries Ltd., Taber, Alberta.

The Belly River seam which is being worked is 4 ft. thick, with sandstone roof and clay pavement, the strata is rolling with a slight dip to the north-east, the cover averages 140 ft. in thickness.

The mine is entered by means of a shaft 14 ft. long by 9 ft. wide by 140 ft. deep.

This shaft was sunk to the coal seam and entries were driven 8 ft. wide by 6 ft. high by 65 ft. long. The coal proving unsatisfactory, the mine was abandoned.

The Canada West Coal Company, Limited. (Mine No. 105).

Mine Office: Taber.
 Head Office: Taber, Alberta.
 Authorized Capital: \$2,400,000.00.
 President: O. A. Robertson.
 Vice-Presidents: J. S. Hough and John R. Howard.
 Directors: O. A. Robertson, F. E. Kenaston, J. S. Hough, John R. Howard, W. L. Ball.
 Secretary: W. L. Ball.
 Treasurer: F. E. Kenaston.
 General Manager: John R. Howard.
 Manager: E. S. F. Huntrods.
 Overman: William Jordan.
 Examiners: H. Evans, E. Marsh, J. H. Robinson, David Jones.
 Mine Surveyor: E. S. F. Huntrods.
 Location of Mine: S.E. $\frac{1}{4}$ Sec. 31, Tp. 9, Rge. 16, West of the 4th Mer.
 Area: 11,500 acres. Character of Coal: Lignite.
 Owner of Property: The Canada West Coal Company, Ltd., Taber, Alberta.

The Belly River seam which is being worked, has an average thickness of 3 ft. 8 inches, with shale and sandstone roof and fire clay pavement, the strata is rolling with a slight dip to the north-east, the cover averaging 93 ft. in thickness.

The mine is entered by a slope 8 ft. high by 14 ft. wide by 294 ft. long, on an inclination of 18 degrees.

Room and pillar work is the system adopted at this mine. Entries are driven 8 ft. wide by 6 ft. high, and the rooms 18 ft. wide by 3 ft. 8 inches high, with pillars between rooms 10 ft. wide by 50 ft. long.

The coal is hoisted from the mine to tippie by an endless creeper chain.

Haulage is done on entries by electric locomotives of the trolley type, and by horses to the sidings.

The plant has a capacity of 1,000 tons per day of 8 hours, the mine cars holding 2,000 lbs.

An airway has been driven to the surface from the inside workings at an angle of 45 degrees.

The screening plant has been re-modeled, also an additional boiler has been installed.

3,600 ft. of electric transmission line have been built from the power house to No. 18 east shaft for the purpose of supplying power to a longwall coal-cutting machine.

The White Ash Collieries, Limited. (Mine No. 106).

Mine Office: Taber.
 Overman: George Hart.
 Mine Surveyor: Eustace S. F. Huntrods.
 Location of Mine: L.S. 3, Sec. 1, Tp. 10, Rge. 17, West of the 4th Mer.
 Area: 20 acres. Character of Coal: Lignite.
 Owners of Property: W. E. Bullock, Herbert K. Bullock, Taber, Alberta.

The Belly river seam which is being worked has a thickness of 3 ft. 8 inches, with sandstone and shale roof and clay pavement, the

strata dips 1 degree to the north-east, the depth of seam from the surface being 60 ft.

The mine is entered by means of a drift 6 ft. high by 7 ft. wide.

The system of working is room and pillar. Entries are driven 7 ft. wide by 6 ft. high, the rooms being 18 ft. wide by 3 ft. 8 inches high, with pillars between rooms 8 ft. wide by 40 ft. long.

The mine is worked on a small scale, having a capacity of 20 tons per day, the mine cars holding 1,000 lbs.

Andrew Larson. (Mine No. 131).

Mine Office: Elcan.
 Overman: Thomas C. Williams.
 Mine Surveyor: Arnold B. Cook.
 Location of Mine: L.S. 9, Sec. 4, Tp. 10, Rge. 17, West of the 4th Mer.
 Area: 30 acres. Character of Coal: Lignite.
 Owners of Property: Mathew and Andrew Larson, Travers, Alberta.

The seam worked is the Belly River, which has an average thickness of 32 inches, with sandstone roof and shale pavement, the dip being .15% in a north-easterly direction.

The mine is entered by a drift 6 ft. high by 6½ ft. wide driven in the coal from the banks of a coulee.

The system of working is room and pillar. Entries are driven 6½ ft. wide by 6 ft. high, the rooms being 16 ft. wide by 32 inches high, with pillars between rooms 10 ft. wide by 50 ft. long.

The plant has a capacity of 25 tons, the mine cars holding 1,000 lbs.

Canadian Pacific Railway Company. (Mine No. 132).

Mine Office: Taber.
 Head Office: Montreal, Canada.
 President: Lord Shaughnessy, K.C.V.O.
 Vice-President: George Bury.
 Directors: R. B. Angus, George Bury, Hon. J. Dunsmuir, F. T. Meighen, Sir Robert T. Holt, David McNicol, A. M. Nanton, Sir E. B. Osler, J. K. L. Ross, Lord Shaughnessy, Sir Thomas T. Skinner, E. W. Beatty.
 Secretary: W. R. Baker.
 Treasurer: H. E. Suckling.
 Overman: William Wallwork.
 Mine Surveyor: Walton Kellett.
 Location of Mine: N.W.¼, Sec. 7, Tp. 10, Rge. 16, West of the 4th Mer.
 Area: 40 acres. Character of Coal: Lignite.
 Owner of Property: Canadian Pacific Railway Company, Lethbridge.

The Belly river seam which is being worked has a thickness of 3 ft. 8 inches, with shale and sandstone roof and clay pavement, the strata dips 1 degree in a north-easterly direction, the cover being 30 ft. in thickness.

The mine is entered by a drift 5½ ft. high by 6 ft. wide, driven in from the south bank of the Belly river.

The system of working is room and pillar. Entries are driven 6 ft. wide by 5½ ft. high, the rooms being 20 ft. wide by 3 ft. 8 inches high, with pillars between rooms 10 ft. wide by 40 ft. long.

The mine produces 10 tons per day, the mine cars holding 1,000 lbs. The product of the mine is used entirely for supplying fuel to the Canadian Pacific Railway Pumping Station near Taber.

Rock Springs Coal and Brick Company, Limited. (Mine No. 170).

Mine Office: Elcan.
Authorized Capital: \$50,000.00.
President: Herbert K. Bullock.
Directors: Herbert K. Bullock, A. L. Bullock.
Sec.-Treas.: A. L. Bullock.
General Manager: Herbert K. Bullock.
Manager: Robert John Lee.
Mine Surveyor: Robert J. Lee.
Location of Mine: L.S. 14, Sec. 3, Tp. 10, Rge. 17, West of the 4th Mer.
Area: 480 acres. Character of Coal: Lignite.
Owner of Property: Rock Springs Coal & Brick Co., Ltd., Elcan, Alberta.

The Belly river seam which is being worked has an average thickness of 3 ft., with sandstone and shale roof and clay pavement, the strata has a dip of $\frac{1}{2}$ degree in a north-easterly direction, the cover being 70 ft. in thickness.

The mine is entered by means of drifts 6 ft. high by $6\frac{1}{2}$ ft. wide, driven in from the bottom of a coulee. The coal is hoisted to the tippie by means of a steam-driven hoist.

The room and pillar system is worked. Entries are driven $6\frac{1}{2}$ ft. wide by 6 ft. high, the rooms being 20 ft. wide by $4\frac{1}{2}$ ft. high, with pillars between rooms 9 ft. wide by 60 ft. long.

The plant has a capacity of 250 tons in 8 hours, the mine cars holding 1,400 lbs.

The mine is connected to the Crow's Nest Pass branch of the Canadian Pacific Railway by a short spur.

Edward Hart. (Mine No. 181).

Mine Office: Taber.
Overman: Edward Hart.
Location of Mine: S.E. $\frac{1}{4}$, Sec. 11, Tp. 10, Rge. 17, West of the 4th Mer.
Area: 250 acres. Character of Coal: Lignite.
Owner of Property: William W. Douglas, Taber, Alberta.

The Belly river, which is the seam being worked, has a thickness of 3 ft. 8 inches, with sandstone roof and clay pavement, the strata dips 1 degree in a north-easterly direction, the cover averaging 70 ft. in thickness.

The mine is entered by means of drifts 6 ft. high by 7 ft. wide, driven in from a coulee.

The room and pillar system of working is adopted. Entries are driven 7 ft. wide by 6 ft. high, the rooms being 16 ft. wide by 3 ft. 8 inches high, with pillars between rooms 10 ft. wide by 50 ft. long.

The output of the mine is 45 tons per day, the mine cars holding 1,000 lbs.

The Golden West Coal Mining Company, Limited. (Mine No. 201).

Mine Office: Taber.
 Head Office: Taber.
 Authorized Capital: \$50,000.00.
 President: Ezra S. Bowden.
 Vice-President: Mrs E. S. Bowden.
 Directors: Ezra S. Bowden, Mrs. E. S. Bowden, Eber E. Black.
 Sec.-Treas.: Mrs. E. S. Bowden.
 General Manager: E. S. Bowden.
 Overman: Eber C. Black.
 Mine Surveyor: James F. Hamilton.
 Location of Mine: L.S. 4, Sec. 18, Tp. 10, Rge. 16, West of the 4th Mer.
 Area: 79.81 acres. Character of Coal: Lignite.
 Owner of Property: The Golden West Coal Mining Co., Ltd., Taber, Alberta.

The seam worked at this mine is the Belly river, and has an average thickness of 4 ft, with shale and sandstone roof and clay pavement, the strata dips $2\frac{1}{2}$ degrees in a north-easterly direction, the cover averaging 90 ft. in thickness.

The mine is entered by drifts 7 ft. wide by 7 ft. high from the bottom of a coulee, the coal being hoisted to the tippie by means of a steam-driven hoist over a surface incline.

The system of working adopted is room and pillar. Entries are driven 7 ft. wide by 7 ft. high, the rooms being 16 ft. wide by 4 ft. high, with pillars between rooms 12 ft. wide by 50 ft. long.

A new tippie with a capacity of 100 tons per day has been erected. The mine cars hold 1,000 lbs.

Connection is made with the Crow's Nest Pass branch of the Canadian Pacific Railway by a short spur.

Regal Collieries, Limited. (Mine No. 228).

Mine Office: Taber.
 Head Office: Detroit, Mich., U.S.A.
 Authorized Capital: \$500,000.00.
 President: William A. Aubin.
 Vice-President: William E. Bullock.
 Directors: William A. Aubin, John C. Frost, William E. Bullock.
 Sec.-Treas.: John C. Frost.
 General Manager: William E. Bullock.
 Manager: Emile LeBlanc.
 Mine Surveyor: Emile LeBlanc.
 Location of Mine: L.S. 8, Sec. 19, Tp. 10, Rge. 16, West of the 4th Mer.
 Area: 400 acres. Character of Coal: Lignite.
 Owner of Property: Regal Collieries, Ltd., Taber, Alberta.

The seam being worked is the Belly river and has an average thickness of 4 ft., with shale and sandstone roof and clay pavement, the strata dips $1\frac{1}{2}$ degrees in a north-westerly direction, the cover being 170 ft. in thickness.

The mine is entered by means of drifts 6 ft. high by 8 ft. wide, driven in from a coulee.

The room and pillar system of working is adopted. Rooms are 18 ft. wide by $4\frac{1}{2}$ ft. high, with pillars between rooms 14 ft. wide by 50 ft. long.

The plant has a capacity of 150 tons per day, the mine cars holding 1,600 lbs.

The following additions have been made to the plant during the year:

Two Leonard return tubular boilers.

One 75 K.W.D.C. Westinghouse generator and a Sirocco fan, 6 ft. diameter, single inlet.

Edward Berford. (Mine No. 228).

Mine Office: Taber.

Overman: Edward Berford.

Mine Surveyor: Robert J. Lee.

Location of Mine: N.W. $\frac{1}{4}$, Sec. 18, Tp. 10, Rge. 16, West of the 4th Mer.

Area: 4,000 acres. Character of Coal: Lignite.

Owner of Property: Herbert K. Bullock, Taber, Alberta.

The Belly river seam which is being worked is 4 ft. 2 inches thick, with shale roof and clay pavement, the strata dips 1% in a north-easterly direction, the cover being 90 ft. in thickness.

The mine is entered by drifts 6 ft. high by 8 ft. wide, driven in the coal from the banks of the river.

The room and pillar system of working is adopted. Entries are driven 8 ft. wide by 6 ft. high, the rooms being 20 ft. wide by 4 ft. 6 inches high, with pillars between rooms 10 ft. wide by 50 ft. long.

The plant has a capacity of 200 tons per day, the mine cars holding 1,500 lbs.

Horses are used for haulage purposes.

Block Coal Collieries, Limited. (Mine No. 391).

Mine Office: Taber.

General Manager: Jean Bilteryst.

Manager: Emile Leblanc.

Mine Surveyor: Emile LeBlanc.

Location of Mine: N. $\frac{1}{2}$, Sec. 19, Tp. 10, Rge. 16, West of the 4th Mer.

Area: 380 acres. Character of Coal: Lignite.

Owner of Property: Jean Bilteryst, Stellarton, Nova Scotia.

The Belly river seam which was worked at this mine is 3 ft. thick, having shale and sandstone roof and clay pavement, the dip of strata is half a degree to the north-west, the cover being 170 ft. in thickness.

The mine is entered by a series of drifts driven in the coal from the river bank.

The system of working adopted is longwall advancing. The mine is now abandoned.

Co-operative Coal Company, Limited. (Mine No. 434).

Mine Office: Elcan.
 Head Office: Cor. High St. and 5th Ave., Moose Jaw, Sask.
 Authorized Capital: \$20,000.00.
 President: Thomas Tonge.
 Directors: Henry Brooks, Bernard Nugent, Thomas Tonge, Edward Counsell.
 Sec.-Treas.: Edward Counsell.
 Overman: Henry Brooks.
 Mine Surveyor: Eustace S. F. Huntrods.
 Location of Mine: S.E.¼, Sec. 4, Tp. 10, Rge. 17, West of the 4th Mer.
 Area: 50 acres. Character of Coal: Lignite.
 Owner of Property: Co-operative Coal Co., Ltd.
 Address of Owner: Cor. High St. and 5th Ave., Moose Jaw, Saskatchewan.

The seam being worked is the Belly river, and has an average thickness of 3 ft., with shale roof and pavement, the strata is level, with a cover averaging 80 ft. in thickness.

The mine is entered by means of drifts 6 ft. high by 7 ft. wide.

The room and pillar system of working is adopted. Entries are driven 7 ft. wide by 6 ft. high, the rooms being 20 ft. wide by 3 ft. high, with pillars between rooms 8 ft. wide by 50 ft. long.

The output of the mine is 25 tons per day, the mine cars holding 1,000 lbs.

The coal is hauled to the railway by teams and shipped to Moose Jaw, Saskatchewan, for sale.

John Howells. (Mine No. 499).

Mine Office: Elcan.
 Overman: John Howells.
 Mine Surveyor: Robert J. Lee.
 Location of Mine: S.E.¼, Sec. 4, Tp. 10, Rge. 17, West of the 4th Mer.
 Area: 10 acres. Character of Coal: Lignite.
 Owner of Property: John Howells, Elcan.

The seam worked at this mine is the Belly river, and has an average thickness of 2 ft. 10 inches, with shale roof and clay pavement, the strata is level, the cover averaging 80 ft. in thickness.

The mine is entered by drifts 6 ft. high by 7 ft. wide, driven in from the coulee banks.

The room and pillar system of working is adopted, entries being driven 7 ft. wide by 6 ft. high, the rooms 16 ft. wide by 4 ft. 6 inches high, with pillars between rooms 10 ft. wide by 30 ft. long.

The mine produces 20 tons per day, the mine cars holding 1,000 lbs.

A shaft 4 ft. by 4 ft. by 25 ft. has been sunk on the side of the coulee and connected to the working places for ventilation purposes.

White Ash Collieries, Limited. (Mine No. 669).

Mine Office, Taber.
 Overman: Edward Oliver.
 Mine Surveyor: Eustace S. F. Huntrods.

Location of Mine: S.½, L.S. 3, Sec. 1, Tp. 10, Rge. 17, West of the 4th Mer.

Area: 20 acres.

Character of Coal: Lignite.

Owners of Property: William E. Bullock and Herbert K. Bullock, Taber.

The seam worked at this mine is the Belly river, and has a thickness of 3 ft. 8 inches, with sandstone roof and clay pavement, the dip of strata is 1 degree, the cover being 60 ft. in thickness.

The mine is entered by means of drifts 6 ft. high by 7 ft. wide, driven in from the banks of a coulee located three miles north-west of Taber.

The system of working is room and pillar. Entries are driven 7 ft. wide by 6 ft. high, rooms 18 ft. wide by 3 ft. 8 inches high, with pillars between rooms 8 ft. wide by 50 ft. long.

The mine produces 20 tons per day, the mine cars holding 1,000 lbs.

BOW ISLAND DISTRICT.—DISTRICT No. 7.

Jonathan J. Mills. (Mine No. 180).

Mine Office: Grassy Lake.

Overman: Alfred Jackson.

Mine Surveyor: Norman Fraser.

Location of Mine: N.W.¼, Sec. 23, Tp. 9, Rge. 13, West of the 4th Mer.

Area: 200 acres.

Character of Coal: Lignite.

Owner of Property: Jonathan J. Mills, Grassy Lake, Alberta.

The Grassy Lake seam which is worked has an average thickness of 3 ft. 4 inches, with shale and coal roof and clay pavement, the strata dips 1 degree in a northerly direction, the cover being 30 ft. in thickness.

The mine is entered by drifts 6 ft. high by 4½ ft. wide, driven in the coal from the side of a coulee.

The room and pillar system of working is adopted. Entries are driven 4½ ft. wide by 6 ft. high, the rooms being 14 ft. wide by 5 ft. high, with pillars between rooms 8 ft. wide by 50 ft. long.

The output of the mine is 15 tons per day, the mine cars holding 1,000 lbs.

Horses are used for haulage purposes.

George Washington Savage. (Mine No. 239).

Mine Office: Winnifred.

Overman: George W. Savage.

Location of Mine: L.S. 10, Sec. 35, Tp. 12, Rge. 10, West of the 4th Mer.

Area: 20 acres.

Character of Coal: Lignite.

Owner of Property: Michael J. O'Neill, Winnifred, Alberta.

The Bow Island seam which is being worked is 4 ft. 9 in. thick, having a soft sandstone roof and shale pavement, the strata dips 1 degree in a south-westerly direction, the cover being 200 ft. in thickness.

The mine is opened up by drifts 6 ft. wide by 6 ft. high.

The room and pillar system of working is adopted. Entries are driven 6 ft. wide by 6 ft. high, the rooms are 18 ft. wide by 6 ft. high, with pillars between rooms 14 ft. wide by 50 ft. long.

The output of the mine is 8 tons per day, the mine cars holding 700 lbs.

Arthur Morgan. (Mine No. 323).

Mine Office: Bow Island.

Overman: Arthur Morgan.

Mine Surveyor: Norman Fraser.

Location of Mine: S. $\frac{1}{2}$, L.S. 8, Sec. 14, Tp. 9, Rge. 11, West of the 4th Mer.

Area: 20 acres. Character of Coal: Lignite.

Owner of Property: Arthur Morgan, Bow Island, Alberta.

The seam worked at this mine is the Grassy Lake, and has a thickness of 2 ft. 9 inches, with shale roof and clay pavement, the strata is level, the cover being 40 ft. in thickness.

The mine is located 10 miles south of Bow Island, and is entered by shafts 6 ft. long by 4 ft. wide by 40 ft. deep.

The room and pillar system of working is adopted. Entries are driven 7 ft. wide by 4 ft. high, the rooms being 16 ft. wide by 3 ft. high, with pillars between rooms 12 ft. wide by 50 ft. long.

The plant has a capacity of 20 tons per day, the mine cars holding 700 lbs.

Frank Kovais. (Mine No. 333).

Mine Office: Granlea.

Overman: Frank Kovais.

Mine Surveyor: Norman Fraser.

Location of Mine: S.W. $\frac{1}{4}$, Sec. 9, Tp. 8, Rge. 8, West of the 4th Mer.

Area: 20 acres. Character of Coal: Lignite.

Owner of Property: Henry H. Foster, Granlea, Alberta.

This mine is working the Grassy Lake seam, which has a thickness of 2 ft. 6 inches, with sandstone roof and clay pavement, the strata dips $11\frac{1}{2}$ degrees in a north-easterly direction, the cover being 150 ft. in thickness.

The mine is entered by drifts 5 ft. high by 6 ft. wide, driven in the coal from the side of a coulee.

The room and pillar system of working is adopted. Entries are driven 6 ft. wide by 5 ft. high, the rooms are 12 ft. wide by 3 ft. 10 in. high, with pillars 8 ft. wide by 50 ft. long.

The output of the mine is 10 tons per day, the mine cars holding 1,000 lbs.

Louis Santoni. (Mine No. 341).

Mine Office: Prospery.

Overman: Louis Santoni.

Mine Surveyor: Norman Fraser.

Location of Mine: E. $\frac{1}{2}$, L.S. 16, Sec. 5, Tp. 8, Rge. 8, West of the 4th Mer.

Area: 20 acres. Character of Coal: Lignite.

Owner of Property: Louis Santoni, Prospery, Alberta.

The seam which is being worked at this mine is the Grassy Lake, and has an average thickness of 2 ft. 6 in., with shale roof and clay pavement, the strata is horizontal, the cover being 150 ft. in thickness.

The mine is located in a coulee 35 miles south-east of Winnifred, and is entered by drifts 5 ft. high by 6 ft. wide.

The system of working adopted is room and pillar. Entries are driven 6 ft. wide by 5 ft. high, the rooms are 15 ft. wide by 4 ft. high, with pillars between rooms 5 ft. wide by 50 ft. long.

The output of the mine is sold locally to the farmers, and averages 20 tons per day, the mine cars holding 1,000 lbs.

James C. Foote. (Mine No. 342).

Mine Office: Pleasant View.

Overman: James C. Foote.

Location of Mine: N. $\frac{1}{2}$, L.S. 9. Sec. 7, Tp. 9, Rge. 8, West of the 4th Mer.

Area: 40 acres. Character of Coal: Lignite.

Owner of Property: James C. Foote, Pleasant View, Alberta.

The Grassy Lake, which is the only seam being worked in this mine, has an average thickness of 2 ft. 6 inches, with soft shale roof and clay pavement, the strata is horizontal, the cover being 60 ft. in thickness.

This mine is located 28 miles south-east of Winnifred, in a small coulee, and is entered by means of drifts 5 ft. high by 6 ft. wide.

The room and pillar system of working is adopted. Entries are driven 6 ft. wide by 5 ft. high, the rooms being 14 ft. wide by 3 ft. high, with pillars between rooms 10 ft. wide by 40 ft. long.

The output of the mine is 10 tons per day, the mine cars holding 700 lbs.

Charles F. Henry. (Mine No. 345).

Mine Office: Bow Island.

Overman: Samuel B. Breeding.

Mine Surveyor: Norman Fraser.

Location of Mine: N.W. $\frac{1}{4}$, Sec. 6, Tp. 8, Rge. 10, West of the 4th Mer.

Area: 20 acres. Character of Coal: Lignite.

Owner of Property: Charles F. Henry, Bow Island, Alberta.

This mine is working the Grassy Lake seam, which has a thickness of 3 ft. 4 inches, with coal and shale roof and clay pavement, the strata dips 1 degree in a south-easterly direction, the cover being 40 ft. in thickness.

The mine is located 16 miles south-east of Bow Island in Forty Mile Coulee, and is entered by means of drifts 4 ft. high by 6 ft. wide.

The mine is worked on the room and pillar system. Entries are driven 6 ft. wide by 4 ft. high, the rooms being 18 ft. wide by 3 $\frac{1}{2}$ ft. high, with pillars between rooms 12 ft. wide by 30 ft. long.

The output is sold locally and averages 10 tons per day, the mine cars holding 700 lbs.

William Roberts. (Mine No. 353).

Mine Office: Foremost.

Overman: William Roberts.

Location of Mine: Sec. 36, Tp. 6, Rge. 12, West of the 4th Mer.

Area: 20 acres. Character of Coal: Lignite.

Owner of Property: William Roberts, Foremost, Alberta.

The seam being worked at this mine has an average thickness of 2 ft. 2 inches, with sandstone roof and clay pavement, the strata is horizontal, the cover being 100 ft. in thickness.

The mine is located in a coulee 4 miles north-east of Foremost, and is entered by drifts 4 ft. high by 6 ft. wide.

The room and pillar system of working is adopted. Entries are driven 6 ft. wide by 4 ft. high, the rooms being 14 ft. wide by 2 ft. 6 inches high, with pillars between rooms 10 ft. wide by 40 ft. long.

The output of the mine is 10 tons per day, the mine cars holding 500 lbs.

Robert A. Salisbury. (Mine No. 358).

Mine Office: Winnifred.

Overman: Perry R. Salisbury.

Mine Surveyor: Norman Fraser.

Location of Mine: N.W. $\frac{1}{4}$, Sec. 22, Tp. 12, Rge. 10, West of the 4th Mer.

Area: 40 acres. Character of Coal: Lignite.

Owners of Property: R. M. Salisbury, R. A. Salisbury and P. R. Salisbury.

Address of Owners: Winnifred, Alberta.

The seam being worked at this mine is the Belly river, and has a thickness of 4 ft. 6 inches, with shale roof and pavement, the strata is level, the cover being 150 ft. in thickness.

The mine is located 14 miles north of Winnifred in a coulee on the south side of the South Saskatchewan river.

The mine is entered by means of drifts 6 ft. wide by 4 ft. 6 in. high, driven in the coal from the side of coulee, the coal being hoisted to the tibble by means of a horse gin over a surface incline 300 ft. long, on an inclination of 32 degrees.

The system of working adopted is room and pillar. Entries are driven 6 ft. wide by 4 ft. 6 inches high, the rooms being 16 ft. wide by 4 ft. 6 inches high, with pillars between rooms 10 ft. wide by 50 ft. long.

The mine has an output of 15 tons per day, the mine cars holding 1,000 lbs. The coal is sold locally to the farmers.

Stephen Schmidt. (Mine No. 370).

Mine Office: Prospery.

Overman: Stephen Schmidt.

Mine Surveyor: Norman Fraser.

Location of Mine: E. $\frac{1}{2}$, L.S. 16, Sec. 30, Tp. 7, Rge. 8, West of the 4th Mer.

Area: 20 acres.

Character of Coal: Lignite.

Owner of Property: Stephen Schmidt, Prospery, Alberta.

The seam being worked at this mine is the Grassy Lake, and has a thickness of 2 ft. 6 inches, with shale roof and clay pavement, the strata lies horizontal, the cover being 150 ft. in thickness.

This mine is located in Seven Persons Coulee, about 30 miles south-east of Winnifred, and is entered by drifts 5 ft. high by 7 ft. wide.

The system of working adopted is room and pillar. Entries are driven 7 ft. wide by 5 ft. high, the rooms being 20 ft. wide by 5 ft. high, with pillars between rooms 7 ft. wide by 40 ft. long.

The output of the mine is 14 tons per day, the mine cars holding 700 lbs.

The output is sold locally to the farmers.

Mark Hancock. (Mine No. 377).

Mine Office: Grassy Lake.

Overman: Mark Hancock.

Mine Surveyor: Norman Fraser.

Location of Mine: S.W. $\frac{1}{4}$, Sec. 25, Tp. 9, Rge. 13, West of the 4th Mer.

Area: 40 acres. Character of Coal: Lignite.

Owner of Property: Mark Hancock, Grassy Lake, Alberta.

The seam being worked at this mine is the Grassy Lake, and has a thickness of 4 ft. 3 inches, with blue shale roof and pavement, the strata dips 3 degrees in a northerly direction, the cover being 100 ft. in thickness.

The mine is located 6 miles south-east of Grassy Lake, and is entered by means of a slope 6 ft. high by 6 ft. wide by 150 ft. long, on an inclination of 8 degrees.

The system of working adopted is room and pillar, entries being driven 6 ft. wide by 8 ft. high, the rooms 13 ft. wide by 5 ft. 3 inches high, with pillars between rooms 10 ft. wide by 40 ft. long.

Horse haulage is used on the slope. The mine produces 10 tons per day, the mine cars holding 900 lbs.

John P. Peairs. (Mine No. 400).

Mine Office: Winnifred.

Overman: John P. Peairs.

Location of Mine: E. $\frac{1}{2}$, L.S. 8, Sec. 21, Tp. 12, Rge. 10, West of the 4th Mer.

Area: 20 acres.

Character of Coal: Lignite.

Owner of Property: John P. Peairs, Winnifred.

This mine is working the Bow Island seam, which has a thickness of 4 ft., with shale roof and pavement, the strata dips 2 degrees in a south-westerly direction, the cover being 140 ft. in thickness.

The mine is located in a coulee 14 miles north of Winnifred, and is entered by means of drifts 4 ft. high by 5 ft. wide.

The room and pillar system of working is adopted, entries being driven 5 ft. wide by 4 ft. high, the rooms 14 ft. wide by 4 ft. high, with pillars between rooms 7 ft. wide by 50 ft. long.

The coal is hoisted to the tippie over a surface incline by means of a horse gin, the capacity of plant being 10 tons per day, the mine cars holding 1,000 lbs.

Walter Wallwork. (Mine No. 448).

Mine Office: Bow Island.
Overman: Walter Wallwork.
Mine Surveyor: Norman Fraser.
Location of Mine: S.E.¼, Sec. 36, Tp. 11, Rge. 11, West of the 4th Mer.
Area: 60 acres. Character of Coal: Lignite.
Owner of Property: Walter Wallwork, Bow Island, Alberta.

The seam worked at this mine is the Bow Island, and has a thickness of 3 ft., with sandstone roof and shale pavement, the strata dips 1 degree to the south-east, the cover being 125 ft. in thickness.

This mine is located in a coulee 5 miles north of Bow Island, and is entered by drifts 4 ft. high by 5 ft. wide.

The room and pillar system of working is adopted. Entries are driven 5 ft. wide by 4 ft. high, the rooms being 12 ft. wide by 3 ft. high, with pillars between rooms 5 ft. wide by 40 ft. long.

The mine produces 18 tons per day, which is all disposed of locally, the mine cars holding 700 lbs.

Luke Raisbeck. (Mine No. 465).

Mine Office: Grassy Lake.
Manager: Luke Raisbeck.
Mine Surveyor: Norman Fraser.
Location of Mine: S.½, Sec. 3, Tp. 10, Rge. 13, West of the 4th Mer.
Area: 320 acres. Character of Coal: Lignite.
Owner of Property: Saskatchewan and Alberta Collieries, Limited.
Address of Owner: c/o Luke Raisbeck, Grassy Lake, Alberta.

The seam being worked at this mine is the Grassy Lake, and has a thickness of 2 ft. 5 inches, with soft shale roof and soft clay pavement, the strata is level, the cover having a thickness of 40 ft.

The mine is located 2 miles south of Grassy Lake, and is entered by drifts 5½ ft. high by 5½ ft. wide.

The room and pillar system of working is adopted. Entries are driven 5½ ft. wide by 5½ ft. high, the rooms being 15 ft. wide by 3½ ft. high, with pillars between rooms 12 ft. wide by 40 ft. long.

The output is 10 tons per day, and is disposed of to the farmers locally, the mine cars holding 700 lbs.

MEDICINE HAT DISTRICT.—DISTRICT No. 8.

The Ansley Coal Company. (Mine No. 37).

Mine Office: Medicine Hat.
Head Office: 385 4th St., Medicine Hat.
Overman: Joseph H. Oliphant.
Mine Surveyor: Robert Hamilton.
Location of Mine: S.W.¼, Sec. 5, Tp. 13, Rge. 6, West of the 4th Mer.
Area: 1,280 acres. Character of Coal: Lignite.
Owners of Property: Harvey and William Ansley.
Address of Owners: 385 4th St., Medicine Hat, Alberta.

The Medicine Hat seam, which is being worked, is 6 ft. 8 ins. thick, with sandstone roof and clay pavement, with a dip of $3\frac{1}{2}$ degrees in a south-westerly direction, having a cover averaging 247 ft. in thickness.

The mine is entered by means of drifts driven in the coal from the south bank of the South Saskatchewan river near Redcliff, the coal being hoisted to the tippie over a surface slope by means of a steam hoist.

The room and pillar system is in operation at this mine. Entries are driven 9 ft. wide by 6 ft. high, the rooms being 12 ft. wide by 6 ft. high, with pillars between rooms 32 ft. wide by 60 ft. long.

An air shaft 6 ft. by 8 ft. by 50 ft., has been sunk to the coal during the year.

Redcliff Brick and Coal Company, Limited. (Mine No. 165).

Mine Office: Redcliff.
Head Office: Redcliff, Alberta.
Authorized Capital: \$900,000.00.
President: C. H. Kohler.
Vice-President: F. H. Peterson.
Directors: V. W. Bayless, E. Hoidale, F. H. Peterson, C. H. Wagner, H. A. Owen, A. B. Cutts, E. H. Christian, J. S. McLean, C. H. Kohler, E. H. Sellhorn, H. N. Lughton.
Secretary: V. W. Bayless.
Treasurer: E. Hoidale.
General Manager: E. H. Sellhorn.
Manager: Robert Hamilton.
Mine Surveyor: Robert Hamilton.
Location of Mine: N.W. $\frac{1}{4}$, Sec. 5, Tp. 13, Rge. 6, West of the 4th Mer.
Area: 2,400 acres. Character of Coal: Lignite.
Owner of Property: Redcliff Brick & Coal Co., Ltd., Redcliff.

There are two mines in operation, a coal mine and a shale mine.

The coal seam is the Medicine Hat, which is 4 ft. 10 in. thick, with slaty shale roof and gray shale pavement, having a dip of 1% in a north-westerly direction, the cover being 200 ft. in thickness.

The shale seam being operated is 9 ft. thick, having a sandy shale roof and black clay pavement, the cover is 88 ft. in thickness.

Both mines are worked on the room and pillar system. Main entries in the coal mine are driven 10 ft. wide by 8 ft. high, side entries 7 ft. wide by $6\frac{1}{2}$ ft. high, the rooms 15 ft. wide by 4 ft. 10 in. high, with pillars between rooms 20 ft. wide by 40 ft. long. The entries in the shale mine are driven 12 ft. wide by 9 ft. high, the rooms being 12 ft. wide by 9 ft. high, with pillars between rooms 30 ft. square.

The coal plant has a capacity of 300 tons per day, the mine cars holding 2,000 lbs., and the shale plant has a capacity of 200 tons per day, the mine cars holding 6,000 lbs.

Open lights are used throughout the mines.

During the year the tippie has been re-modeled, a rotary dump with a capacity of 300 tons per day has been added, also an Ingersoll-Rand air compressor has been installed for the purpose of supplying compressed air to 6 coal cutting machines of the Harrison puncher type.

Moses Brown. (Mine No. 356).

Mine Office: Medicine Hat.

Overman: Robert Horn.

Location of Mine: N.E.¼, Sec. 28, Tp. 12, Rge. 7, West of the 4th Mer.

Area: 20 acres.

Character of Coal: Lignite.

Owner of Property: Wellington Scauffer, Medicine Hat, Alberta.

The Medicine Hat, which is the only seam worked, is 6 ft. thick, with shale roof and clay pavement, the seam lies horizontal with a cover 200 ft. in thickness.

The mine is located in a coulee, and is entered by means of drifts driven in the coal.

The system of working is room and pillar. Entries are driven 10 ft. wide by 6 ft. high, the rooms being 12 ft. wide by 6 ft. high, with pillars between rooms 18 ft. by 40 ft.

The coal is hoisted from the mine entrance to the tippie by means of an aerial tramway 800 ft. long, operated by a gasoline engine.

The plant has a capacity of 30 tons per day, the mine cars and bucket on tramway each holding 1,000 lbs.

Taras Manchenko. (Mine No. 602).

Mine Office: Little Plume.

Overman: Taras Manchenko.

Location of Mine: N.½, L.S. 6, Sec. 2, Tp. 9, Rge. 5, West of the 4th Mer.

Area: 20 acres.

Character of Coal: Lignite.

Owner of Property: William Conn, Woolchester, Alberta.

The Medicine Hat, which is the only seam worked, has a thickness of 6 ft., with sandstone roof and clay pavement, the dip being 18 degrees in an easterly direction.

The room and pillar system is adopted. Entries are driven 7 ft. wide by 6 ft. high, the rooms are 14 ft. wide by 6 ft. high, with pillars between rooms 18 ft. wide by 40 ft. long. The output of the mine is 20 tons per day, the cars holding 1,000 lbs. The coal is sold locally, the mine being located 30 miles from a railway.

ALDERSYDE DISTRICT.—DISTRICT No. 9.*Thomas Edwin Smith. (Mine No. 135).*

Mine Office: Carmangay.

Overman: Thomas Edwin Smith.

Mine Surveyor: Norman Fraser.

Location of Mine: L.S. 2, Sec. 36, Tp. 14, Rge. 22, West of the 4th Mer.

Area: 40 acres.

Character of Coal: Lignite.

Owner of Property: Andrew Laidlaw, Columbia Buildings, Spokane, Wash., U.S.A.

The seam being worked at this mine is the Bow River, which has a thickness of 2 ft. 6 inches, with shale and sandstone roof and shale pavement, the strata dips 3 degrees in a north-westerly direction, the cover being 80 ft. in thickness.

The mine is located 14 miles east of Carmangay, in a coulee, and is entered by means of drifts 6 ft. high by 5 ft. wide.

The room and pillar system of working is adopted. Entries are driven 5 ft. wide by 6 ft. high, the rooms being 20 ft. wide by 3 ft. high, with pillars between rooms 30 ft. wide by 60 ft. long.

The mine produces an output of 15 tons per day, which is disposed of locally to the farmers, the mine cars holding 1,000 lbs.

Henry Therriault. (Mine No. 136).

Mine Office: Long Coulee.

Overman: Henry Therriault.

Mine Surveyor: Norman Fraser.

Location of Mine: S.E.¼, Sec. 8, Tp. 15, Rge. 22, West of the 4th Mer.

Area: 640 acres. Character of Coal: Lignite.

Owner of Property: Henry Therriault, Long Coulee, Alberta.

The Bow River seam, which is being worked at this mine, has a thickness of 2 ft. 9 inches, with shale and sandstone roof and soft shale pavement, the strata dips 1 degree in a north-easterly direction, the cover being 90 ft. in thickness.

The mine is located 7 miles east of Champion, and is entered by a slope, 6 ft. high, by 5 ft. wide by 150 ft. long, on an inclination of 8 degrees.

The system of working adopted is room and pillar. Entries are driven 5 ft. wide by 3½ ft. high, the rooms being 16 ft. wide by 3½ ft. high, with pillars between rooms 8 ft. wide by 60 ft. long.

Horse haulage is used on the slope to the tippie, the output being 14 tons per day, the mine cars holding 500 lbs.

John W. Brown. (Mine No. 151).

Mine Office: Reid Hill.

Overman: Griffith G. Hughes.

Mine Surveyor: Norman Fraser.

Location of Mine: N.E.¼, Sec. 24, Tp. 16, Rge. 23, West of the 4th Mer.

Area: 40 acres. Character of Coal: Lignite.

Owner of Property: John W. Brown, Reid Hill, Alberta.

The seam being operated at this mine is the Bow River, and has a thickness of 2 ft. 4 inches, with sandstone roof and soft shale pavement, the strata is level, the cover being 55 ft. in thickness.

This mine is located 12 miles north-east of Champion, and is entered by drifts 6 ft. high by 6 ft. wide, driven in the coal from the bank of a coulee.

The method of working adopted is room and pillar. Entries are driven 6 ft. wide by 6 ft. high, the rooms being 17 ft. wide by 3 ft. high, with pillars between rooms 15 ft. wide by 60 ft. long.

The production is 15 tons per day, which is disposed of locally to the farmers, the mine cars holding 400 lbs.

Watkin E. Watkins. (Mine No. 198).

Mine Office: Champion.

Overman: Watkin E. Watkins.

Mine Surveyor: Norman Fraser.

Location of Mine: N.W.¼, Sec. 4, Tp. 16, Rge. 23, West of the 4th Mer.

Area: 40 acres. Character of Coal: Lignite.

Owner of Property: Watkin E. Watkins, Champion, Alberta.

This mine works the Bow River seam, which has a thickness of 4 ft., with coal and shale roof and clay pavement, the strata is level, the cover being 50 ft. in thickness.

The mine is located 6 miles north-east of Champion, and is entered by a slope 6 ft. high by 5 ft. wide by 135 ft. long, on an inclination of 8 degrees, the coal being hauled up the slope by a horse.

The room and pillar system of working is adopted. Entries are driven 13 ft. wide by 3 ft. 8 inches high, the rooms being 14 ft. wide by 3 ft. 8 inches high, with pillars between rooms 10 ft. wide by 40 ft. long.

The output is 20 tons per day, and is disposed of locally, the mine cars holding 900 lbs.

An air shaft was sunk and connected with the workings during the year.

Staveley Coal Mining Company. (Mine No. 264).

Mine Office: Long Coulee.

Overman: Herbert Rhodes.

Mine Surveyor: Norman Fraser.

Location of Mine: N.E.¼, Sec. 29, Tp. 14, Rge. 21, West of the 4th Mer.

Area: 40 acres.

Character of Coal: Lignite.

Owner of Property: Staveley Coal Mining Company, Long Coulee, Alberta.

This mine worked the Bow River seam, which has a thickness of 3 ft. 6 in., with shale roof and pavement.

The seam is level, the cover being 150 ft. in thickness.

Very little work was done during the year owing to the coal proving dirty. The mine was abandoned in March, 1916.

The entries were driven in the hillside 110 ft. above the valley, to which the coal was lowered by a long chute built on the face of the hill.

Ellis Brothers. (Mine No. 296).

Mine Office: Champion.

Overman: James Ellis.

Mine Surveyor: William Ellis.

Location of Mine: S.E.¼, Sec. 8, Tp. 16, Rge. 23, West of the 4th Mer.

Area: 160 acres.

Character of Coal: Lignite.

Owner of Property: James Roebuck, Champion, Alberta.

This mine is working the Bow River seam, which has a thickness of 4 ft., with coal and shale roof and soft clay pavement, the strata is level, the thickness of cover being 40 ft.

The mine is located 6 miles north-east of Champion, and is entered by slopes 6½ ft. high by 5 ft. wide by 140 ft. long, on an inclination of 8 degrees, the coal being hauled to the tipple by horses.

The system of working adopted is room and pillar. Entries are driven 14 ft. wide by 4 ft. high, the rooms being 16 ft. wide by 3 ft. 6 inches high, with pillars between rooms 22 ft. wide by 30 ft. long.

The output of the mine is 20 tons per day, the mine cars holding 700 lbs.

Thomas Edwin Smith. (Mine No. 461).

Mine Office: Yetwood.

Overman: John Brennan.

Mine Surveyor: Norman Fraser.

Location of Mine: E. $\frac{1}{2}$, L.S. 9, Sec. 28, Tp. 15, Rge. 21, West of the 4th Mer.

Area: 20 acres.

Character of Coal: Lignite.

Owner of Property: Thomas E. Smith, Yetwood, Alberta.

The seam being worked at this mine is the Bow River, and has a thickness of 2 ft. 8 inches, with shale roof and pavement, the strata dips 1 degree in a northerly direction, the cover being 22 ft.

This mine is located in Snake Valley, 25 miles east of Champion, and is entered by means of drifts 4 ft. high by 5 ft. wide.

The room and pillar system of working is adopted. Entries are driven 5 ft. wide by 4 ft. high, the rooms being 12 ft. wide by 3 ft. 4 inches high, with pillars 10 ft. wide by 50 ft. long.

The mine produces 20 tons per day, the mine cars holding 500 lbs.

McNaughton & Blusson. (Mine No. 476).

Mine Office: Champion.

Location of Mine: N.E. $\frac{1}{4}$, Sec. 33, Tp. 15, Rge. 23, West of the 4th Mer.

Owner of Property: Henry McNaughton, Champion, Alberta.

Practically no work has been done during the year.

Isaac Bennett. (Mine No. 659).

Mine Office: Armada.

Overman: Isaac Bennett.

Location of Mine: N.E. $\frac{1}{4}$, Sec. 29, Tp. 16, Rge. 21, West of the 4th Mer.

Area: 140 acres.

Character of Coal: Lignite.

Owner of Property: Samuel Henderson, Lomond, Alberta.

The seam being worked at this mine is the Bow River, and has a thickness of 2 ft. 6 inches, with sandstone roof and clay pavement, the strata lies in a horizontal position, the cover being 85 ft. in thickness.

This mine is located 18 miles from a railway, and is entered by means of a slope 5 ft. high by 5 ft. wide by 45 ft. long, on an inclination of 6 degrees, up which the coal is hauled to the tippie by a horse.

The system of working is room and pillar. Entries are driven 6 ft. wide by 5 ft. high, the rooms being 20 ft. wide by 3 ft. high, with pillars between rooms 10 ft. wide by 50 ft. long.

The output of the mine is 10 tons per day, the mine cars holding 700 lbs.

Thomas Edwin Smith. (Mine No. 663).

Mine Office: Long Coulee.

Overman: Evan Munton.

Location of Mine: L.S. 3, Sec. 17, Tp. 15, Rge. 21, West of the 4th Mer.

Area: 40 acres.

Character of Coal: Lignite.

Owner of Property: Thomas Edwin Smith, Yetwood, Alberta.

This mine is working the Bow River seam, which has a thickness of 3 ft., with sandstone roof and clay pavement.

The mine is located 13 miles from a railway, and is entered by means of drifts 4½ ft. high by 6 ft. wide.

The system of working adopted is room and pillar. Entries are driven 6 ft. wide by 4½ ft. high, the rooms being driven 14 ft. wide by 4 ft. high, with pillars 10 ft. wide by 50 ft. long.

The mine produces 10 tons per day, the mine cars holding 1,000 lbs. The output is disposed of locally to the settlers.

HIGH RIVER DISTRICT.—DISTRICT No. 10.

A. D. McPherson. (Mine No. 30).

Mine Office: Black Diamond.

Mine Surveyor: Robert Coulthard.

Location of Mine: L.S. 13, Sec. 8, Tp. 20, Rge. 2, West of the 5th Mer.

Area: 120 acres. Character of Coal: Lignite.

Owner of Property: A. D. McPherson, Black Diamond, Alberta.

The seam being worked at this mine has a thickness of 7 ft., with shale roof and clay pavement, the dip of strata is 80 degrees in an easterly direction.

This mine is located near Black Diamond, 14 miles west of Okotoks, and is entered by means of shafts 10 ft. 6 inches long by 5 ft. 6 inches wide by 32 ft. deep.

The room and pillar system of working is adopted, the entries are driven 7 ft. wide by 7 ft. high, the rooms being 12 ft. wide by 7 ft. high, with pillars between rooms 20 ft. wide by 50 ft. long.

The coal is hoisted from the shaft bottom to the tippie by a steam-driven hoist, the capacity of the plant being 50 tons per day, the mine cars holding 1,000 lbs.

William Kummer. (Mine No. 120).

Mine Office: Long View.

Overman: William Bischoff.

Mine Surveyor: Norman Fraser.

Location of Mine: S.W.¼, Sec. 8, Tp. 18, Rge. 2, West of the 5th Mer.

Area: 160 acres. Character of Coal: Lignite.

Owner of Property: B. E. Parton, Toppenich, Wash., U.S.A.

The seam being worked at this mine has a thickness of 8 ft., with clay roof and pavement, the strata is vertical, the cover above the outcrop on the prairie being 40 ft.

The mine is located 30 miles west of High River, and is entered by means of a drift 6 ft. high by 7 ft. wide, driven in from the banks of a coulee.

The work consists in driving the entries, which are 7 ft. wide by 6 ft. high, the pillars between entries being 15 ft. wide by 50 ft. long.

The output of the mine is 25 tons per day, the mine cars holding 1,000 lbs. The output is disposed of at the mine to settlers in the vicinity.

Joseph Woolings. (Mine No. 361).

Mine Office: Priddis.

Overman: Joseph Woolings.

Mine Surveyor: Norman Fraser.

Location of Mine: N.W.¼, Sec. 7, Tp. 22, Rge. 3, West of the 5th Mer.

Area: 160 acres.

Character of Coal: Lignite.

Owner of Property: Joseph Woolings, Priddis, Alberta.

This mine is working a seam of coal which has a thickness of 6 ft. 9 in., with shale roof and pavement, the strata dips 41 degrees in a south-westerly direction, the cover being 24 ft. in thickness.

The mine is located 27 miles south-west of Calgary, and is entered by means of a shaft 6 ft. long by 4 ft. wide by 24 ft. deep, with a slope driven on the pitch of the seam for 75 ft. from the shaft bottom.

The coal is hoisted from foot of slope to shaft bottom by a steam-driven hoist located on the surface.

The room and pillar system of working is adopted. Entries are driven 6 ft. wide by 6 ft. high, the rooms being 12 ft. wide by 6 ft. 9 in. high, with pillars between rooms 20 ft. wide by 50 ft. long.

The plant has a capacity of 35 tons per day, the mine cars holding 800 lbs.

Richard Duell. (Mine No. 362).

Mine Office: Long View.

Overman: Joseph Powers.

Mine Surveyor: Norman Fraser.

Location of Mine: Sec. 8, Tp. 18, Rge. 2, West of the 5th Mer.

Area: 160 acres.

Character of Coal: Lignite.

Owner of Property: Edward Little, High River, Alberta.

The seam worked at this mine has a thickness of 15 ft., with shale roof and pavement, the strata dips 80 degrees in a north-westerly direction, the seam outcrops on the side of the river bank, having 30 ft. of cover on the prairie.

This mine is located in a coulee 27 miles west of High River, and is entered by means of a drift 8 ft. high by 10 ft. wide.

The only work done was the driving of entries, which are 6 ft. wide by 6 ft. high, with pillars 15 ft. by 60 ft.

This mine is now abandoned, the coal seam not having proved continuous.

August Henry Romey. (Mine No. 433).

Mine Office: Lineham.

Overman: August H. Romey.

Location of Mine: S.E.¼, Sec. 2, Tp. 20, Rge. 3, West of the 5th Mer.

Character of Coal: Lignite.

Owner of Property: Alex Lehman, Lineham, Alberta.

The seam being worked at this mine has a thickness of 1 ft. 10 inches, with shale roof and pavement, the strata dips 45 degrees in a westerly direction, the cover being 20 ft. in thickness.

This mine is located near Lineham and is entered by means of a drift 5 ft. high by 6 ft. wide.

The room and pillar system of working is adopted. Entries are driven 6 ft. wide by 5 ft. high, the rooms being 12 ft. wide by 1 ft. 10 inches high, with pillars between rooms 20 ft. wide by 50 ft. long.

The mine has a capacity of 25 tons per day, the mine cars holding 1,000 lbs.

CANMORE DISTRICT.—DISTRICT No. 11.

Canmore Coal Company, Limited. (Mine No. 2).

Mine Office: Canmore.
Head Office: Minersville, Penn., U.S.A.
Authorized Capital: \$50,000.00.
President: James B. Neale.
Vice-President: Frederick D. Weyerhaeuser.
Directors: James B. Neale, F. D. Weyerhaeuser, Orrin H. Ingram, S. Brinckerhoff Thorne, Joseph G. Thorp.
Secretary: Edmund M. Parker.
Treasurer: S. B. Thorne.
General Manager: M. B. Morrow.
Manager: William Musgrove.
Overmen: A. S. Wright, James Clyne.
Examiners: Jos. Sandino, M. Bovio, Charles Fowers, John Musgrove, H. McKinnon, W. DeVoy, P. Ramsey, W. Shivon, A. Besso.
Mine Surveyor: T. B. Williams.
Location of Mine: Sec. 29, Tp. 24, Rge. 10, West of the 5th Mer.
Area: 8,241 acres. Character of Coal: Bituminous.
Owner of Property: Canmore Coal Co., Ltd., Canmore, Alberta.

There are three seams being worked at this mine, the Stewart having a thickness of 10 ft., with sandstone roof and pavement; the Sedlock having a thickness of 5 ft., with sandstone roof and shale pavement; and the Carey having a thickness of 7 ft., with sandstone roof and shale pavement, the strata pitching from 5 degrees to vertical.

The mine is entered by means of a slope 6 ft. high by 16 ft. wide, on an inclination of 12 degrees, driven in the coal from the outcrop.

The system of working is room and pillar across the pitch. Main entries are driven 10 ft. wide by 7 ft. high, counter entries 8 ft. wide by 7 ft. high, the rooms being 14 ft. wide by 5 to 10 ft. high, with pillars 30 to 50 ft. wide by 50 to 60 ft. long.

In the Stewart seam jig-ways are driven to the rise, the mine cars being handled from the entry to the rooms by compressed air hoists located on the main entry.

The method of haulage on the main slope is by steam-driven hoist located on the surface, compressed air locomotives are used on the main entries, horses being used from working places to sidings.

The following improvements and additions to the plant have been made during the year: a rock tunnel 9 ft. wide by 7 ft. high has been driven from the foot of No. 2 slope to connect with the main gangway in the Carey seam; a telephone system has been installed in the No. 2 mine; a barometric condenser has been installed in the power house, and electric lights have been placed in the miners' cottages.

A 6 in. borehole has been put down from the surface to the head of the slope in the Carey seam. This will allow for hoisting rope on slope to be taken from electric hoist located on the surface. 5,900 ft. of electric power line has been built to convey power from generator to electric hoist located on surface near entrance to No. 7 jig on the Stewart seam, the intention being to drive a slope on the seam below the main gangway, the coal being hoisted up the slope to the main gangway by the above hoist.

Georgetown Collieries, Ltd. (Mine No. 231).

Mine Office: Georgetown, Canmore.
 Head Office: 28-30 Lime St., London, E.C.
 Authorized Capital: \$250,000.00.
 President: Sidney K. George.
 Directors: S. K. George, J. T. Phoenix, S. C. K. George, Sir Thomas H. Holdrick.
 Sec.-Treas.: William Edward Grant Hale.
 General Manager: W. Holt Wain.
 Manager: John L. Parker.
 Examiners: Joseph Sedlock, James Hill, James Reid.
 Mine Surveyor: John L. Parker.
 Location of Mine: N.W.¼, Sec. 1, Tp. 25, Rge. 11, West of the 5th Mer.
 Area: 1,299½ acres. Character of Coal: Bituminous.
 Owner of Property: Kananaskis Coal Co., Ltd., Calgary, Alberta.

The seam worked at this mine has a thickness of 6 ft. 6 ins., with shale roof and sandstone pavement, the strata has a dip of 22 degrees in a south-easterly direction, the cover having a thickness of from 25 to 250 ft.

This mine is located 3 miles west of Canmore, and is entered by means of slopes 7 ft. high by 12 ft. wide by 500 ft. long, on an inclination of 22 degrees.

The room and pillar system of working is adopted. Entries are driven 12 ft. wide by 6 ft. high, the rooms being 12 ft. wide by 6 ft. high, with pillars between rooms 30 ft. wide by 50 ft. long.

The capacity of the plant is 400 tons per day, the mine cars holding 2,000 lbs.

Haulage on the slope is by steam-driven hoist, horses being used on the entries.

This property has been purchased by the Canmore Coal Co., Ltd., and the mine is now closed.

BANFF DISTRICT.—DISTRICT NO. 12.

Department of Natural Resources (Canadian Pacific Railway Company) Bankhead Mines. (Mine No. 80).

Mine Office: Bankhead.
 Head Office: Calgary, Alberta.
 President: Lord Shaughnessy, K.C.V.O.
 Vice-President: D. McNicoll.
 Directors: R. B. Angus, A. R. Creelman, K.C., Hon. James Dunsmuir, Sir Sanford Fleming, Herbert S. Holt, Chas. R. Hosmer, Hon. Robert McKay, W. D. Matthews, David McNicoll, A. M. Nanton, Sir E. B. Osler, Sir Thomas G. Shaughnessy, Sir Thomas Skinner, Sir W. T. Van Horne.
 Secretary: W. R. Baker.

Treasurer: H. E. Suckling.
 General Superintendent: Lewis Stockett. Supt.: D. G. Wilson.
 Manager: John Watters.
 Overman: Thomas Bastian.
 Examiners: Alec G. Watters, Wm. Hartley, J. H. Brownrigg, Robert
 Littler, John Littler, M. B. Embree.
 Mine Surveyor: John A. McLeod.
 Location of Mine: Sec. 19, Tp. 26, Rge. 11, West of the 5th Mer.
 Area: 10,920 acres. Character of Coal: Anthracite.
 Owner of Property: Canadian Pacific Railway, Dept. Natural Resources.
 Address of Owner: Calgary, Alberta.

There are three seams being worked in this mine, No. 2 being 8 ft. in thickness, No. 0 being 2 ft. 6 in. thick, and No. 0000 being 3 ft. 6 in. thick, each having sandstone roof and pavement, the dip of strata is 50 degrees in a westerly direction, the seams outcropping on the side of the mountain.

The mine is located at Bankhead, near Banff, and is entered by a series of drifts 8 ft. high by 12 ft. wide, driven in at different levels.

The coal is lowered from "C" level to "B" level over a surface incline 2,900 ft. long, and from "B" to "A" level over a surface incline 2,200 ft. long, the hoist at "B" level being electrically operated and the hoist at "C" level being operated by compressed air.

Alberta Copper Company, Limited. (Mine No. 628).

Authorized Capital: \$500,000.00.
 President: R. W. McArdle.
 Vice-President: J. Howell.
 Sec.-Treas.: F. J. Bushfield.
 Directors: R. W. McArdle, J. Howell, F. J. Bushfield, J. Dawson, W.
 Middleditch.

This mine is situated about 2½ miles south of the station of Eldon, on the main line of the C.P.R. west of Calgary, and the Company own five mineral claims. On this property there is a vein of copper between 5 ft. and 6 ft. in width. The only work that has been done is the driving of a tunnel 6 ft. by 7 ft. for a distance of 154 ft.

The mine is now abandoned.

Calgary Copper Company, Limited. (Mine No. 629).

Authorized Capital: \$20,000.00.
 President: J. T. McDonald.
 Vice-President: D. A. McLeod.
 Secretary-Treasurer: D. A. McLeod.
 Directors: J. T. McDonald, D. A. McLeod, Major Robie.
 General Manager: Arthur Wood.

This mine is situated about three miles north of Eldon station. The Company owns six mineral claims. The property has a 12 ft. vein of copper ore, but very little work has been done up to the present. A tunnel 6 ft. by 8 ft. by 37 ft. in length has been driven, but no other work has been done.

The mine is now abandoned.

DRUMHELLER DISTRICT.—DISTRICT No. 13.

O. N. Gilbert. (Mine No. 299).

Mine Office: Rosebud.
Overman: Joseph Debrinski.
Mine Surveyor: Norman Fraser.
Location of Mine: S.W.¼, Sec. 29, Tp. 26, Rge. 21, West of the 4th Mer.
Area: 160 acres. Character of Coal: Lignite.
Owner of Property: O. N. Gilbert, Grain Exchange, Calgary, Alberta.

The seam being worked at this mine has a thickness of 4 ft., with sandstone roof and clay pavement, the strata has a dip of 1 degree in a north-westerly direction, the cover being 70 ft. in thickness.

This mine is located 8 miles south-east of Rosebud, and is entered by means of drifts 5 ft. high by 8 ft. wide.

The room and pillar system of working is adopted. Entries are driven 8 ft. wide by 4 ft. high, the rooms being 10 ft. wide by 4 ft. high, with pillars between rooms 25 ft. square.

The mine has a capacity of 50 tons per day, the mine cars holding 600 lbs.

The output is disposed of to the settlers in the vicinity.

Newcastle Coal Co., Ltd. (Mine No. 317).

Mine Office: Drumheller.
Authorized Capital: \$250,000.00.
President: Jesse Gouge.
Directors: Jesse Gouge, G. N. Coyle, Maud Gouge, G. W. Coyle.
Sec.-Treas.: G. N. Coyle.
General Manager: Jesse Gouge.
Manager: James Holden.
Overman: Joseph Thompson.
Examiner: J. Parker.
Mine Surveyor: James Holden.
Location of Mine: S.E.¼, Sec. 9, Tp. 29, Rge. 20, West of the 4th Mer.
Area: 1,000 acres. Character of Coal: Lignite.
Owner of Property: Newcastle Coal Co., Ltd., Drumheller, Alberta.

The No. 2 seam which is being worked at this mine has a thickness of 4 ft. 6 inches, with shale roof and pavement, the strata is practically level, the cover varying from 30 ft. to 300 ft. in thickness.

The mine is located near Drumheller, and is entered by means of a short slope driven from the bottom of the valley, on an inclination of 20 degrees.

The room and pillar system of working has been adopted. Entries are driven 10 ft. wide by 5 ft. 6 inches high, with pillars between rooms 25 ft. wide by 50 ft. long.

The tittle and main entries are lighted by incandescent electric lamps.

The plant has a capacity of 350 tons per day, the mine cars holding 1,000 lbs.

Rosedale Coal and Clay Products Co., Ltd. (Mine No. 346).

Mine Office: Rosedale.
Authorized Capital: \$1,500,000.00.
President: C. E. Friend.
Vice-President: J. F. Moodie.
Directors: C. E. Friend, J. F. Moodie, O. S. Chapin, H. H. Moore, Wm. Carson, Mrs. Stirrett, Dr. McRae.
Sec.-Treas. W. H. A. Thompson.
General Manager: J. F. Moodie.
Manager: Thomas O'Donnell.
Overman: James Hill.
Mine Surveyor: Kenneth Moodie.
Location of Mine: N.W. $\frac{1}{4}$, Sec. 28, Tp. 28, Rge. 19, West of the 4th Mer.
Area: 14,000 acres. Character of Coal: Lignite.
Owner of Property: Rosedale Coal & Clay Products Co., Ltd., Rosedale, Alta.

The No. 3 seam which is being worked at this mine, has a thickness of 8 ft. 6 inches, with sandstone roof and pavement, the strata is practically level, the cover varying from 38 ft. to 350 ft. in thickness.

The mine is located at Rosedale, five miles east of Drumheller, and is entered by means of shafts 18 ft. long by 10 ft. 6 inches wide by 38 ft. deep, sunk from the valley.

The room and pillar system of working is adopted. Entries are driven 8 ft. wide by 8 ft. high, the rooms being 20 to 25 ft. wide by 8 ft. high, with pillars between rooms 25 to 30 ft. wide by 60 ft. long.

The present output of the mine is 250 tons per day, the mine cars holding 2,000 lbs.

The following improvements have been made during the year: A steel tippie equipped with a Marcus screen capable of handling 1,000 tons in eight hours has been installed, the hoisting shaft has been lined with re-inforced concrete, the whole plant being fire-proof; a hoisting engine has been installed, also an electrical generator. The electric power will be used for lighting purposes, also to operate the fan and tippie machinery. A new bridge has been erected across the Red Deer river, giving railroad connections with the Saskatoon-Calgary branch of the Canadian Northern Railway.

Rose Deer Coal Mining Co., Ltd. (Mine No. 347).

Mine Office: Wayne.
Head Office: 229 Eighth Ave. West, Calgary, Alberta.
Authorized Capital: \$1,000,000.00.
President: V. Raby.
Vice-President: Alex. Robertson.
Directors: V. Raby, L. A. Tupper, Chas. S. Smith, Alex. Robertson, G. V. Tupper.
Secretary: L. A. Tupper.
Treasurer: Chas. S. Smith.
General Manager: George V. Tupper.
Manager: Peter Allen.
Overman: William C. Allan.
Examiners: Ninian Duncan, Robert Muir.
Mine Surveyor: Peter Allen.
Location of Mine: Sec. 7, Tp. 28, Rge. 19, West of the 4th Mer.
Area: 6,000 acres. Character of coal: Lignite.
Owner of Property: Rose Deer Coal Mining Co., Ltd., Saskatoon, Sask.

The No. 3 seam which is being worked at this mine has a thickness of 6 ft. 8 inches, with hard clay roof and shale pavement, the strata dipping 1% in a north-westerly direction, the cover having a thickness of 250 ft.

This mine is located at Wayne, a station on the Calgary-Saskatoon branch of the C.N.R., to which it is connected by a short spur.

The mine is entered by means of slopes 7 ft. high by 10 ft. wide by 170 ft. long, on an inclination of 12 degrees.

The room and pillar system of working is adopted. Entries are driven 10 ft. wide by 7 ft. high, the rooms being 20 ft. wide by 6 ft. 8 inches high, with pillars between rooms 25 ft. wide by 60 ft. long.

The plant has a capacity of 500 tons per day, the mine cars holding 2,500 lbs.

Safety lamps of the Wolf type are used throughout the mine.

The following additions and improvements have been made to the plant during the year:

One 60 H.P. boiler locomotive type.

One 17 K.W.D.C. generator to supply current for driving mine fan and lighting the plant and slope.

One 3 phase 70 K.W.A.C. generator with one 10 K.W. exciter for same.

One 110 H.P. single cylinder engine for operating above generator and fitted with automatic cut-off shaft governor.

One Canadian Ingersoll-Rand coal-cutting machine.

New power-house, fan-house, store, office and 16 workmen's cottages have been built.

John Neisner. (Mine No. 348).

Mine Office: Munson.

Overman: Fred Larson.

Mine Surveyor: James Hargreaves.

Location of Mine: S.E.¼ Sec. 23, Tp. 29, Rge. 20, West of the 4th Mer.

Area: 160 acres. Character of coal: Lignite.

Owner of Property: John Neisner, Munson, Alberta.

The seam which was worked at this mine has a thickness of 5 ft. 8 inches, with two bands of bone running through it, with shale roof and clay pavement, the strata is practically level, the cover being 200 ft. in thickness.

The mine is located in Fox Coulee, about 4 miles north-east of Drumheller, and is entered by means of drifts driven in the face of the bank.

Very little work was done during the year, the mine now being abandoned.

Drumheller Land Co., Ltd. (Mine No. 349).

Mine Office: Drumheller, Alberta.
Head Office: 421 Columbia Building, Spokane, Washington, U.S.A.
Authorized Capital: \$10,000.00.
President: Samuel Drumheller.
Vice-President: D. M. Drumheller.
Directors: Samuel Drumheller, Jerome L. Drumheller, D. M. Drumheller, Alfred Coleridge, P. C. Shine.
Sec.-Treas.: Jerome L. Drumheller.
General Manager: Samuel Drumheller.
Manager: James Crowder.
Overman: William Robinson.
Examiner: Edward Robinson.
Mine Surveyor: James Crowder.
Location of Mine: N.E.¼ Sec. 2, Tp. 29, Rge. 20, West of the 4th Mer.
Area: 1,540 acres. Character of coal: Lignite.
Owner of Property: Drumheller Land Co., Ltd., Drumheller, Alberta.

The No. 3 seam which is being worked at this mine has a thickness of 8 ft., the upper 4 ft. 6 inches only being worked, the lower portion consisting of clay and bony coal, the roof is shale and the pavement clay, the strata has a dip of 1% in a north-westerly direction, the cover being from 80 to 250 ft. in thickness.

This mine is located at Drumheller, and is entered by means of a slope 6 ft. high by 6 ft. wide by 240 ft. long, on an inclination of 19 degrees.

The room and pillar system of working is adopted. Entries are driven 8 ft. wide by 6 ft. high, the rooms being 18 to 30 ft. wide by 4 ft. 6 inches high, with pillars between rooms 18 to 35 ft. wide by 50 ft. long.

The coal is hoisted up the slope by a steam-driven haulage engine.

The plant has a capacity of 500 tons per day, the mine cars holding 2,000 lbs.

No improvements or additions have been made to the plant during the year.

Safety lamps of the Wolf type are used throughout the mine.

Midland Collieries, Ltd. (Mine No. 367).

Mine Office: Drumheller, Alberta.
Authorized Capital: \$300,000.00.
President: T. G. McMullen.
Directors: T. G. McMullen, W. F. Jennison, W. G. Fraser, W. J. MacDougall.
Sec.-Treas.: James MacMurray.
General Manager: S. Lent McMullen.
Manager: Thomas Mather.
Overman: T. E. Moore.
Examiners: Horatio Nelson and Gordon Clarke.
Mine Surveyor: James Crowder.
Location of Mine: N.E.¼ Sec. 9, Tp. 29, Rge. 20, West of the 4th Mer.
Area: 1,240 acres. Character of coal: Lignite.
Owner of Property: Midland Collieries, Ltd., Drumheller, Alberta.

The No. 3 seam which is being worked at this mine has a thickness of 7 ft., with sandstone roof and shale pavement, the seam is practically level, the cover being from 125 to 350 ft. in thickness.

The mine is located 3 miles north-west of Drumheller, and is entered by means of a slope 6 ft. high by 10 ft. wide by 380 ft. long, on an inclination of 19 degrees.

The room and pillar system of working is adopted. Entries are driven 9 ft. wide by 7 ft. high, the rooms being 16 ft. wide by 7 ft. high, with pillars 25 to 35 ft. wide by 60 ft. long.

The plant has a capacity of 800 tons per day, the mine cars holding 1,800 lbs.

This mine is connected with the Calgary-Saskatoon branch of the C.N.R. by means of a short spur.

Safety lamps of the Wolf type are used throughout the mines.

Red Deer Valley Coal Co., Ltd. (Mine No. 402).

Mine Office: Drumheller, Alberta.

Authorized Capital: \$500,000.00.

President: Slocum Howland.

Vice-President: A. P. Patrick.

Directors: Slocum Howland, A. P. Patrick, W. H. Lyon.

Secretary: W. H. Lyon.

Treasurer: Slocum Howland.

Manager: D. A. Macaulay.

Overman: Edward Bridge.

Mine Surveyor: D. A. Macaulay.

Location of Mine: On road allowance on east side of Sec. 7, Tp. 29, Rge. 20. West of the 4th Mer.

Area: 3,500 acres. Character of coal: Lignite.

Owner of Property: Red Deer Valley Coal Co., Ltd., Drumheller, Alta.

The No. 3 seam which is being worked at this mine has a thickness of 5 ft. 8 inches, with sandstone roof and shale pavement, the strata is practically level, the cover being from 230 to 400 ft. in thickness.

The mine is located $4\frac{1}{2}$ miles north-west of Drumheller, and is entered by means of shafts 8 ft. 5 inches wide by 17 ft. 4 inches long by 230 ft. deep.

The system of working adopted is room and pillar. Entries are driven 10 ft. wide by 7 ft. high, the rooms being 16 ft. wide by 5 ft. 8 inches high, with pillars between rooms 16 to 34 ft. wide by 50 ft. long.

The plant is equipped with Marcus screen electrically operated and capable of handling 1,000 tons per day, the mine cars holding 2,000 lbs.

This mine is connected with the Calgary-Saskatoon branch of the C.N.R. by a spur $1\frac{1}{2}$ miles in length.

An air shaft 13 ft. 8 inches long by 8 ft. wide has been sunk during the year.

Safety lamps of the Wolf type are used throughout the mine.

Zarth & Embury. (Mine No. 403).

Mine Office: Munson, Alberta.
Overman: John Zarth.
Mine Surveyor: James Hargreaves.
Location of Mine: L.S. 7, Sec. 22, Tp. 29, Rge. 20, West of the 4th Mer.
Area: 120 acres. Character of Coal: Lignite.
Owner of Property: R. E. Bishop, Munson, Alberta.

The seam which was worked at this mine has a thickness of 4 ft. 6 inches, with clay roof and shale pavement, the strata is practically level, the cover having a thickness of from 20 to 250 ft.

The mine is located in Fox Coulee, $4\frac{1}{2}$ miles north-east of Drumheller and is entered by means of a slope 6 ft. high by 6 ft. wide by 60 ft. long, on an inclination of 12 degrees.

The room and pillar system of working is adopted. Entries are driven 8 ft. wide by 5 ft. high, the rooms being 14 ft. wide by 4 ft. 6 inches high, with pillars between rooms 11 ft. wide by 25 ft. long.

The mine has a capacity of 30 tons per day, the mine cars holding 600 lbs. No work has been done during the year and the mine is now abandoned.

Sterling Coal Co., Ltd. (Mine No. 422).

Mine Office: Drumheller, Alberta.
Authorized Capital: \$100,000.00.
President: G. G. Jewell.
Directors: G. G. Jewell, J. B. Anderson.
Sec.-Treas.: J. B. Anderson.
General Manager: G. G. Jewell.
Manager: John Robertson.
Examiner: Isaac Hyde.
Mine Surveyor: John Robertson.
Location of Mine: S.W. $\frac{1}{4}$ Sec. 9, Tp. 29, Rge. 20, West of the 4th Mer.
Area: 440 acres. Character of coal: Lignite.
Owner of Property: Sterling Coal Co., Ltd., Drumheller, Alberta.

The No. 3 seam which is being worked at this mine has a thickness of 5 ft., with shale roof and clay pavement, the strata is practically level, the cover having a thickness of from 150 to 450 ft.

The mine is located $3\frac{1}{2}$ miles west of Drumheller, and is entered by shafts 12 ft. long by 9 ft. wide by 150 ft. deep.

The system of working adopted is room and pillar. Entries are driven 9 ft. wide by 6 ft. 6 inches high, the rooms being 36 ft. wide by 5 ft. high, with pillars between rooms 25 to 35 ft. wide by 60 ft. long.

The plant has a capacity of 300 tons per day, the mine cars holding 3,000 lbs.

The coal is undercut by Rand Radial coal-cutting machines operated by compressed air, then blasted, Monobel No. 1 fired by electric battery being used for this purpose.

Safety lamps of the Wolf type are used throughout the mine.

During the year a fire destroyed the power house. This has been re-built and the damaged machinery replaced.

The mine is connected with the C.N.R. Calgary-Saskatoon branch by means of a spur line about three-quarters of a mile in length.

Star Coal Mines, Ltd. (Mine No. 436).

Mine Office: Aerial, Alberta.
 Authorized Capital: \$50,000.00.
 President: J. R. Brodie.
 Vice-President: Wm. S. Henderson.
 Directors: J. R. Brodie, Wm. S. Henderson, Mabel Brodie.
 Sec.-Treas.: Wm. S. Henderson.
 General Manager: Wm. S. Henderson.
 Manager: Joseph D. Thomas.
 Mine Surveyor: Norman Fraser.
 Location of Mine: S.E. $\frac{1}{4}$ Sec. 28, Tp. 28, Rge. 19, West of the 4th Mer.
 Area: 85 acres. Character of coal: Lignite.
 Owner of Property: Star Coal Mines, Ltd., Aerial, Alberta.

The No. 3 seam which is being worked at this mine outcrops on the east bank of the Red Deer river at this point, having a thickness of 6 ft., with sandstone roof and clay pavement, the strata is practically level, the cover having a thickness of from 20 to 350 ft.

This mine is located one mile east of Rosedale, and is entered by drifts 7 ft. high by 10 ft. wide, driven in the coal from the river bank and 30 ft. above the water, the tipple is located on a flat on the west side of the river, which is at this point 300 ft. wide.

The coal is taken to the tipple from the mine by means of an aerial tramway, the mine cars being lifted off the trucks and hauled across the river to the tipple.

The tipple is equipped with shaking screen, belt driven from a steam engine.

The tipple and mine entrance are lighted by incandescent electric lamps.

The plant has a capacity of 200 tons in 8 hours, the mine cars holding 1,500 lbs.

Open lights are used throughout the mine. This mine is connected to the Calgary-Saskatoon branch of the C.N.R. by a spur one mile in length.

Premier Coal Co., Ltd. (Mine No. 439).

Mine Office: Drumheller, Alberta.
 Head Office: 807 Centre Street, Calgary, Alberta.
 Authorized Capital: \$50,000.00.
 President: A. E. Wilson.
 Directors: A. E. Wilson, J. K. Miller, O. H. Patrick, W. D. Gordon.
 Sec.-Treas.: O. H. Patrick.
 General Manager: A. E. Wilson.
 Manager: James McCulloch.
 Overman: J. K. Miller.
 Examiner: M. Gilday.
 Mine Surveyor: Norman Fraser.
 Location of Mine: L. S. 3, Sec. 10, Tp. 29, Rge. 20, West of the 4th Mer.
 Area: 160 acres. Character of coal: Lignite.
 Owner of Property: Premier Coal Co., Ltd.
 Address of Owner: 807 Centre Street, Calgary, Alberta.

The No. 2 seam which is being worked at this mine has a thickness of 5 ft., with shale roof and pavement, the strata is practically level, the cover having a thickness of from 30 to 300 ft.

The mine is located $1\frac{1}{2}$ miles west of Drumheller, and is entered by means of a slope 6 ft. high by 8 ft. wide by 65 ft. long, on an inclination of 15 degrees.

The system of working adopted is room and pillar. Entries are driven 10 ft. wide by 6 ft. high, the rooms being 18 ft. wide by 5 ft. high, with pillars between rooms 18 to 25 ft. wide by 60 ft. long.

The plant has a capacity of 150 tons in 8 hours, the mine cars holding 2,000 lbs.

Connection is made with the Calgary-Saskatoon branch of the C.N.R. by means of a short spur.

A washhouse equipped with shower sprays and clothes hangers attached to chains has been built for the accommodation of the workmen.

Open lights are used throughout the mine.

B. T. Brooks. (Mine No. 464).

Mine Office: Drumheller, Alberta.

Overman: B. T. Brooks.

Mine Surveyor: James Hargreaves.

Location of Mine: L. S. 4, Sec. 23, Tp. 29, Rge. 20, West of the 4th Mer.

Area: 100 acres. Character of coal: Lignite.

Owner of Property: B. T. Brooks, Drumheller, Alberta.

The seam which is being worked at this mine has the following section: 18 inches top coal, 18 inches bone, and 32 inches bottom coal, with clay roof and pavement, the strata is practically level, the cover being from 45 to 200 ft. in thickness.

This mine is located in Fox Coulee about $3\frac{1}{2}$ miles north-east of Drumheller, and is entered by drifts 5 ft. high by 8 ft. wide, driven in from the side of the coulee, 50 ft. above the bottom of the valley.

The room and pillar system of working is adopted. Entries are driven 10 ft. wide by 5 ft. high, the rooms being 16 ft. wide by 5 ft. 8 inches high, with pillars between rooms 12 to 20 ft. wide by 60 ft. long.

The plant has a capacity of 100 tons per day, the mine cars holding 1,000 lbs.

The coal is hauled from the mine to the railway by teams.

Open lights are used throughout the mine.

Alberta Block Coal Co., Ltd. (Mine No. 620).

Mine Office: Drumheller, Alberta.

Authorized Capital: \$200,000.00.

President: G. N. Coyle.

Vice-President: G. W. Coyle.

Directors: G. N. Coyle, G. W. Coyle, Jesse Gouge, Wilson Gouge, James Holden.

Sec.-Treas.: Jesse Gouge.

General Manager: Jesse Gouge.

Manager: James Holden.

Mine Surveyor: James Holden.

Location of Mine: N.W. $\frac{1}{4}$ Sec. 3, Tp. 29, Rge. 20, West of the 4th Mer.
 Area: 500 acres. Character of coal: Lignite.
 Owner of Property: Alberta Block Coal Co., Ltd., Drumheller, Alberta.

The No. 2 seam which is being worked at this mine has a thickness of 5 ft. 6 inches, with sandstone roof and fireclay pavement, the strata is practically level, the cover having a thickness of from 35 to 300 ft.

The mine is located $1\frac{3}{4}$ miles west of Drumheller, and is entered by means of shafts, the hoisting shaft is 14 ft. long by 9 ft. wide, the air shaft being 5 ft. square by 32 ft. deep.

The four entry room and pillar system of working is adopted. Entries are driven 10 ft. wide by 6 ft. high, the rooms being 20 ft. wide by 5 ft. 6 inches high, with pillars between entries 30 ft. wide by 50 ft. long, and between rooms 22 ft. wide by 60 ft. long.

The hoisting shaft is equipped with a self-dumping cage, the coal being dumped over bar screen to weigh basket, then passing over screens to railway cars.

The plant has a capacity of 450 tons in 8 hours, the mine cars holding 2,400 lbs. A spur track connects the mine with the Calgary-Saskatoon branch of the Canadian Northern Railway.

Open lights are used throughout the mine.

A. C. Clarke. (Mine No. 634).

Mine Office: Verdant Valley.
 General Manager: A. C. Clarke.
 Location of Mine: N.E. $\frac{1}{4}$ Sec. 14, Tp. 28, Rge. 19, West of the 4th Mer.
 Area: 40 acres. Character of coal: Lignite.
 Owner of Property: N. W. Clarke, c/o Morning Albertan, Calgary, Alta.

The seam being worked at this mine has a thickness of 2 ft. 8 inches, with soft clay roof and hard clay pavement, the strata is practically level, the cover being 5 ft. in thickness.

The mine is located 3 miles south-east of Rosedale on the east bank of the Red Deer river, the work consisting of stripping the surface.

The output is disposed of locally to the settlers in the vicinity.

The Western Commercial Co., Ltd. (Mine No. 640).

Mine Office: Wayne.
 Authorized Capital: \$1,500,000.00.
 President: Vital Raby.
 Directors: V. Raby, R. Besse, D. L. Lucy, W. Law, J. Raby, T. H. Lancaster, A. Laurendeau.
 Sec.-Treas.: P. Laurendeau.
 Manager: David Gray.
 Mine Surveyor: David Gray.
 Location of Mine: S.E. $\frac{1}{4}$ Sec. 7, Tp. 28, Rge. 19, West of the 4th Mer.
 Area: 3,000 acres. Character of coal: Lignite.
 Owner of Property: The Western Commercial Co., Ltd., Wayne, Alta.

The No. 3 seam which is being worked at this mine has a thickness of 6 ft. 8 inches, with sandstone roof and pavement, the strata is practically level, the cover being 250 ft. in thickness.

This mine was opened up during the year, and is located half a mile east of Wayne, and is entered by a slope 7 ft. high by 7 ft. wide by 100 ft. long, on an inclination of 14 degrees.

The system of working adopted is room and pillar. Entries are driven 10 ft. wide by 7 ft. high, the rooms being 20 ft. wide by 6 ft. 8 inches high, with pillars between rooms 25 ft. wide by 60 ft. long.

A tippie built of lumber has been equipped with Marcus screen, electrically driven by a 40 H.P. electric motor.

The steam plant consists of one 150 H.P. and one 80 H.P. boiler producing steam for an Ottumwa hoisting engine, and one 100 H.P. electric generator.

A 25 H.P. motor was installed for operating a Sirocco fan for mine ventilation, also an air compressor with a capacity of 700 cu. ft. of air per min. for operating 3 Radial-axe coal-cutting machines.

The plant has a capacity of 500 tons per day of 8 hours, the mine cars holding 2,500 lbs.

The following buildings have been erected: engine house, boiler room, office, powder house, blacksmith and carpenter shops, barn, washhouse and cottages for workmen.

Henderson & Shaw. (Mine No. 643).

Mine Office: Wayne.
 General Manager: Wm. S. Henderson.
 Overman: W. C. Allen.
 Mine Surveyor: Norman Fraser.
 Location of Mine: S.E. $\frac{1}{4}$, Sec. 7, Tp. 28, Rge. 19, West of the 4th Mer.
 Area: 320 acres. Character of coal: Lignite.
 Owner of Property: Henderson and Shaw, Aerial, Alberta.

Only prospecting work was done at this mine, a shaft being sunk 6 ft. long by 6 ft. wide by 30 ft. deep, the seam being 2 ft. 6 inches in thickness, with sandstone roof and shale pavement.

Owing to the unsatisfactory condition of the seam work was discontinued.

BIG VALLEY DISTRICT.—DISTRICT NO. 14.

Big Valley Collieries, Ltd. (Mine No. 364).

Mine Office: Big Valley.
 Authorized Capital: \$50,000.00.
 President: John Gillespie.
 Vice-President: S. L. Smith.
 Directors: John Gillespie, S. L. Smith, William Gillespie, A. Albertson.
 Sec.-Treas.: William Gillespie.
 General Manager: A. Albertson.
 Manager: A. W. Baxter.
 Mine Surveyor: Norman Fraser.
 Location of Mine: N.W. $\frac{1}{4}$ Sec. 1, Tp. 36, Rge. 20, West of the 4th Mer.
 Area: 1,300 acres. Character of coal: Lignite.
 Owner of Property: Big Valley Collieries, Ltd., Big Valley, Alberta.

The seam which is being worked has a thickness of 6 ft. 6 inches, with clay roof and pavement, the strata is practically level, the cover having a thickness of from 50 to 200 ft.

This mine is located one mile north of Big Valley and is entered by means of a slope 6 ft. high by 9 ft. wide by 30 ft. long, on an inclination of 10 degrees.

The room and pillar system of working is adopted. Entries are driven 9 ft. wide by 6 ft. high, the rooms being 16 ft. wide by 6 ft. 6 in. high, with pillars between rooms 14 and 50 ft. wide by 60 ft. long.

The plant has a capacity of 350 tons per day, the mine cars holding 2,400 lbs.

Connection is made to the Edmonton-Calgary branch of the C. N. R. by means of a short spur.

Open lights are used throughout the mine.

McFadden & Farnell. (Mine No. 468).

Mine Office: Big Valley.

Location of Mine: L. S. 12 Sec. 36, Tp. 35, Rge. 20, West of the 4th Mer.

Area: 20 acres. Character of coal: Lignite.

Owner of Property: R. T. Davidson, Big Valley, Alberta.

The seam which was worked at this mine has a thickness of 4 ft., with clay roof and pavement, the strata is practically level, the cover being from 5 to 50 ft. in thickness.

This mine is located half a mile north of Big Valley, and is entered by a drift 5 ft. high by 6 ft. wide. No work has been done during the year and the mine is now abandoned.

R. A. Ross. (Mine No. 469).

Mine Office: Scollard.

Overman: Harry Simkims.

Mine Surveyor: James Hargreaves.

Location of Mine: L. S. 9 and 10, Sec. 34, Tp. 34, Rge. 21, West of the 4th Mer.

Area: 40 acres. Character of coal: Lignite.

Owner of Property: R. A. Ross, Scollard, Alberta.

The seam which is being worked at this mine has a thickness of 4 ft. 6 inches, with clay roof and shale pavement, the strata is practically level, the cover having a thickness of 70 ft.

This mine is located in a coulee on the east bank of the Red Deer river, 5 miles west of Scollard, and is entered by drifts 5 ft. high by 6 ft. wide.

The system of working adopted is room and pillar. Entries are driven 6 ft. wide by 5 ft. high, the rooms being 12 ft. wide by 5 ft. high, with pillars between rooms 14 ft. wide by 40 ft. long.

The plant has a capacity of 30 tons per day, the mine cars holding 700 lbs.

The output is disposed of to the settlers in the vicinity.

Clyde M. Wooden. (Mine No. 471).

Mine Office: Scollard.

Overman: Clyde M. Wooden.

Mine Surveyor: Norman Fraser.

Location of Mine: N.E. $\frac{1}{4}$ Sec. 18, Tp. 34, Rge. 21, West of the 4th Mer.

Area: 20 acres. Character of coal: Lignite.

Owner of Property: E. J. Walrod, Scollard, Alberta.

The seam being worked at this mine has a thickness of 5 ft. 6 inches, with sandstone roof and shale pavement, the strata is practically level, the cover being 50 ft. in thickness.

The mine is located in a coulee on the banks of the Red Deer river 6 miles south-west of Scollard, and is entered by means of drifts 7 ft. high by 8 ft. wide.

The room and pillar system of working is adopted. Entries are driven 7 ft. 6 inches wide by 5 ft. 6 inches high, the rooms being 12 ft. wide by 5 ft. 6 inches high, with pillars between rooms 8 ft. wide by from 40 to 60 ft. long.

The mine has a capacity of 25 tons per day, the mine cars holding 600 lbs. The output is disposed of to the settlers in the vicinity.

Edwin Hildahl. (Mine No. 472).

Mine Office: Morrin.

Overman: Edwin Hildahl.

Location of Mine: L. S. 7, Sec. 28, Tp. 31, Rge. 21, West of the 4th Mer.

Area: 20 acres. Character of coal: Lignite.

Owner of Property: Edwin Hildahl, Morrin, Alberta.

The seam being worked at this mine has a thickness of 2 ft., with clay roof and shale pavement, the strata is practically level, the cover being 8 ft. in thickness.

The mine is located on the west bank of the Red Deer river, 9 miles west of Morrin.

The method of working is to strip the surface clay off. The mine is worked only during the winter after the river has frozen over.

W. R. Cooke. (Mine No. 473).

Mine Office: Morrin.

Location of Mine: S.E. $\frac{1}{4}$ Sec. 28, Tp. 31, Rge. 21, West of the 4th Mer.

Area: 5 acres. Character of coal: Lignite.

Owner of Property: W. R. Cooke, Morrin, Alberta.

The seam worked at this mine has a thickness of 2 ft., with shale and clay roof and clay pavement, the strata is practically level, the cover being 8 ft. in thickness.

The mine is located on the west bank of the Red Deer, 9 miles west of Morrin, and is operated as a stripping pit.

No work has been done at this mine during the year, and it is now abandoned.

Fred Spencer. (Mine No. 639).

Mine Office: Big Valley.
 Overman: John Zarth.
 Mine Surveyor: Norman Fraser.
 Location of Mine: L. S. 12, Sec. 36, Tp. 35, Rge. 20, West of the 4th Mer.
 Area: 20 acres. Character of coal: Lignite.
 Owner of Property: Fred Spencer, Big Valley, Alberta.

The seam which is being worked at this mine has a thickness of 4 ft., with clay roof and pavement, the strata is practically level, the cover having a thickness of 8 ft.

The mine is located near Big Valley, and is entered by a slope 6 ft. high by 6 ft. wide by 40 ft. long, on an inclination of 6 degrees.

The room and pillar system of working is adopted. Entries are driven 8 ft. wide by 4 ft. 6 inches high, the rooms being 16 ft. wide by 4 ft. 6 inches high, with pillars between rooms 12 ft. wide by 50 ft. long.

The mine has a capacity of 25 tons per day, the mine cars holding 1,000 lbs. The output is disposed of to the settlers in the vicinity.

The cover being only 8 ft. in thickness arrangements are being made to operate this mine by stripping the surface.

BRAZEAU DISTRICT.—DISTRICT NO. 15.

Brazeau Collieries, Ltd. (Mine No. 256).

Mine Office: Nordegg.
 Head Office: 9 Toronto Street, Toronto, Ontario.
 Authorized Capital: \$4,000,000.00.
 President: Sir William McKenzie.
 Vice-President: Martin Nordegg.
 Directors: Sir Donald Mann, Sir Wm. McKenzie, A. J. Mitchell, Martin Nordegg, George W. Buxenstein, Emil Baerwald, L. Jadot.
 Sec.-Treas: H. Prudhomme.
 General Manager: Martin Nordegg. Consulting Engineer: Ernest Gheur.
 Manager: John Shanks.
 Overmen: James M. Stewart, William Eccleston.
 Examiners: John McLellan, Andrew McQueen, William Westnedge, George Snarey.
 Mine Surveyor: William Stevenson, Jr.
 Location of Mine: N.W.¼ Sec. 22, Tp. 40, Rge. 15, West of the 5th Mer.
 Area: 1,500 acres. Character of coal: Bituminous.
 Owner of Property: Brazeau Collieries, Ltd., 9 Toronto Street, Toronto, Ontario.

There are two seams being worked at this mine, No. 2 having a thickness of 7 ft., with sandstone roof and shale pavement, and No. 3 having a thickness of 14 ft., with shale roof and pavement, the strata has a dip of 12 degrees in a south-westerly direction, the seams outcrop on the ridge, the average cover over No. 3 seam being 200 ft., and over No. 2 seam 400 ft.

These mines are located at Nordegg at the end of the steel on the C.N.R.-Brazeau branch, and are entered by drifts 7 ft. high by 12 ft. wide driven in the coal from the outcrop on a flat 150 ft. above the railway level.

The tipple is located on the flat above the railway, the coal being taken to the loading terminal by means of a rubber belt conveyor, which discharges on to a Marcus screen.

The tippie machinery, conveyor, screen and box car loader are electrically operated.

The system of working adopted is room and pillar. Three entries are driven in from the outside, entries being 7 ft. wide and 7 ft. high in No. 2 seam, and 7 ft. wide and 12 ft. high in No. 3 seam, the rooms are 14 ft. wide by 6 ft. high in No. 2 seam, and 14 ft. wide by 12 ft. high in No. 3 seam, the pillars being from 25 to 75 ft. wide by 50 ft. long.

The plant has a capacity of 2,000 tons per day, the mine cars holding 2,500 lbs.

During the year an electric haulage system has been installed from the entrances of both mines to the tippie. This installation consists of two electric trolley locomotives of 50 H.P. each, and does away with the horse haulage formerly used on the outside.

Saunders Creek Coal Co., Ltd. (Mine No. 388).

Mine Office: Rocky Mountain House.

Authorized Capital: \$200,000.00.

Directors: James Wright, Percy McDermott, Edward Fortner.

Secretary: E. S. Brett.

Treasurer: James Wright.

Overman: Edward Fortner.

Mine Surveyor: Edward Fortner.

Location of Mine: N.E.¼ Sec. 24, Tp. 40, Rge. 13, West of the 5th Mer.

Area: 1,320 acres. Character of coal: Bituminous.

Owner of Property: Saunders Creek Coal Co., Ltd., Rocky Mountain House, Alberta.

The seam of coal being worked at this mine has a thickness of 4 ft. 6 in., with clay shale roof and pavement, the strata dips 8 degrees in a north-easterly direction, the cover varying from 50 to 300 ft. in thickness.

The mine is located on the Brazeau branch of the C.N.R., 35 miles west of Rocky Mountain House, and is entered by means of drifts 6 ft. high by 10 ft. wide.

The room and pillar system of working is adopted. Entries are driven 10 ft. wide by 6 ft. high, the rooms being 20 ft. wide by 4 ft. 6 in. high, with pillars between rooms 25 ft. wide by 50 ft. long.

The haulage is done by horses, both in the mine and on the surface from mine entrance to tippie.

The plant has a capacity of 100 tons per day, the mine cars holding 1,500 lbs.

BROOKS DISTRICT.—DISTRICT No. 16.

Prairie Coal Company, Limited. (Mine No. 226).

Mine Office: Eyremore.
Head Office: Regina, Sask.
Authorized Capital: \$1,000,000.00.
President: Avery Casey.
Vice-President: C. E. Callum.
Directors: James Balfour, George Campbell, George Reilly.
Sec.-Treas.: Charles R. Westgate.
General Manager: Charles R. Westgate.
Overman: Andrew Foster.
Mine Surveyor: Norman Fraser.
Location of Mine: S.E. $\frac{1}{4}$ Sec. 16, Tp. 17, Rge. 17, West of the 4th Mer.
Area: 5,000 acres. Character of coal: Lignite.
Owner of Property: Prairie Coal Co., Ltd., Eyremore, Alberta.

The No. 1 seam, which is the only seam being worked, is 5 ft. thick, lying horizontal, with an average cover of 120 ft. in thickness.

The mine is entered by drifts 6 ft. high by 7½ ft wide, driven in from the river bank.

The system of working is room and pillar. Entries are driven 8 ft. wide by 6 ft. high, rooms are driven 16 ft. wide by 5 ft. high, with pillars between rooms 10 ft. wide by 175 ft. long.

The plant has a capacity of 70 tons per day, the mine cars holding 1,000 lbs.

Open lights are used throughout the mine.

An air shaft 5 ft. wide by 6 ft. long by 110 ft. deep has been sunk to the coal from the prairie level.

Blackfoot Indians. (Mine No. 72).

This mine is operated on the Blackfoot Indian Reserve by the Indians, the entire output being disposed of locally. This reserve is south of Gleichen.

Baker, Hoge & Baker. (Mine No. 234).

Mine Office: Eyremore.
Overman: W. T. Baker.
Location of Mine: Sec. 11, Tp. 17, Rge. 17, West of the 4th Mer.
Character of Coal: Lignite.
Owner of Property: Bullock, Ewing & Bullock, Taber, Alberta.

The No. 1 seam, which is the only seam being worked, is 5 ft. thick, with shale roof and hard clay pavement, lying horizontal, with an average cover of 120 ft. in thickness.

The mine is entered by drifts 5 ft. high by 7 ft. wide, driven in from the river bank.

The system of working is room and pillar. Entries are driven 8 ft. wide by 6 ft. high, rooms are driven 18 ft. wide by 5 ft. high, with pillars between rooms 12 ft. wide by 150 ft. long.

Open lights are used throughout the mine.

William G. Noble. (Mine No. 257).

Mine Office: Comet.
Overman: William G. Noble.
Mine Surveyor: Norman Fraser.
Location of Mine: S.W.¼ Sec. 7, Tp. 23, Rge. 14, West of the 4th Mer.
Area: 90 acres. Character of coal: Lignite.
Owner of Property: John H. Weaver, Calgary, Alberta.

The seam being worked has an average thickness of 2 ft., with clay roof and pavement, the strata is level and the cover varies from 25 ft. to 200 ft. in thickness.

This mine is located on the east bank of the Red Deer river, 25 miles north of Brooks, and is entered by means of drifts 5 ft. high by 6 ft. wide, driven in the coal.

The room and pillar system of working is adopted. Entries are driven 6 ft. wide by 4 ft. high, the rooms being 14 ft. wide by 4 ft. high, with pillars 8 ft. wide by 40 ft. long.

The capacity of the plant is 30 tons per day, the mine cars holding 600 lbs.

The output is sold locally to the farmers.

J. B. Shultz. (Mine No. 360).

Mine Office: Standard.
General Manager: J. B. Shultz.
Overman: Edward J. Messenger.
Mine Surveyor: Norman Fraser.
Location of Mine: N.W.¼ Sec. 2, Tp. 25, Rge. 22, West of the 4th Mer.
Area: 40 acres. Character of coal: Lignite.
Owner of Property: Standard Coal & Development Co., Ltd., Standard.

The seam being worked has an average thickness of 3 ft. 8 inches, with sandstone roof and clay pavement, the strata is level, the depth of cover being 50 ft. in thickness.

The mine is located at the town of Standard, and is entered by means of a slope 5 ft. high by 10 ft. wide by 75 ft. long.

The coal is hoisted up the slope to the tippie by means of a gasoline operated hoist.

The room and pillar system of working is adopted. Entries are driven 8 ft. wide by 5 ft. high, the rooms being 10 ft. wide by 4 ft. 6 in. high, with pillars between rooms 30 ft. wide by 100 ft. long.

The plant has a capacity of 25 tons per day, the mine cars holding 1,000 lbs.

P. F. Clemens. (Mine No. 460).

Mine Office: Gem, via Bassano.
Overman: P. F. Clemens.
Mine Surveyor: Norman Fraser.
Location of Mine: S.W.¼ Sec. 12, Tp. 23, Rge. 15, West of the 4th Mer.
Area: 40 acres. Character of coal: Lignite.
Owner of Property: P. F. Clemens, Gem, via Bassano.

The No. 1 seam which is being worked, has an average thickness of 4 ft., with sandstone roof and clay pavement, the strata dips 2 degrees in a south-westerly direction.

This mine is located 30 miles north-east of Bassano, on the west bank of the Red Deer river, and is entered by drifts driven in from the bank.

The mine is worked on the room and pillar system. Entries are driven 6 ft. wide by 6 ft. 6 inches high, the rooms being 12 ft. wide by 4 ft. high, with pillars between rooms 12 ft. wide by 20 ft. long.

The plant has a capacity of 30 tons per day, the mine cars holding 500 lbs.

John Krozier. (Mine No. 484).

Mine Office: Hutton.

Overman: John Krozier.

Mine Surveyor: Norman Fraser.

Location of Mine: N.E. $\frac{1}{4}$ Sec. 7, Tp. 23, Rge. 14, West of the 4th Mer

Area: 40 acres. Character of coal: Lignite:

Owner of Property: Philips Elliot, Montana, U.S.A.

The seam being worked is 3 ft. 6 inches thick, with shale roof and clay pavement, the strata is horizontal, the cover varying from 60 ft. to 200 ft.

The mine is entered by means of drifts driven in the coal from the banks of the Red Deer river.

The mine is worked on the room and pillar system. Entries are driven 5 ft. wide by 6 ft. high, the rooms are 14 ft. wide by 4 ft. high, with pillars between rooms 8 ft. wide by 50 ft. long.

The plant has a capacity of 30 tons per day, the mine cars holding 500 lbs.

HANNA DISTRICT.—DISTRICT No. 17.

John H. Smith. (Mine No. 262).

Mine Office: Sheerness, Alberta.

Overman: Robert J. Campbell.

Mine Surveyor: Norman Fraser.

Location of Mine: L. S. 2, Sec. 19, Tp. 29, Rge. 12, West of the 4th Mer.

Area: 60 acres. Character of coal: Lignite.

Owner of Property: John H. Smith, Sheerness, Alberta.

The seam being worked at this mine has a thickness of 10 ft., with coal roof and hard clay pavement, the strata is level, the cover being 25 ft. in thickness.

This mine is located at Sheerness, 18 miles south-east of Hanna, and is entered by means of a slope 8 ft. high by 8 ft. wide by 50 ft. long, up which the coal is hoisted to the tippie by means of a steam-driven winch.

The room and pillar system of working is adopted. Entries are driven 8 ft. wide by 8 ft. high, the rooms being 14 ft. wide by 8 ft. high, with pillars between rooms 12 ft. wide by 50 ft. long.

The mine produces 40 tons per day, the mine cars holding 1,000 lbs.

The output of the mine is disposed of locally to the farmers.

F. W. Laarz. (Mine No. 309).

Mine Office: Fraserton, Alberta.

Mine Surveyor: Norman Fraser.

Location of Mine: S.E. $\frac{1}{4}$ Sec. 21, Tp. 28, Rge. 14, West of the 4th Mer.

Area: 30 acres. Character of coal: Lignite.

Owner of Property: F. W. Laarz, Fraserton, Alberta.

This mine is located 22 miles south-east of Hanna. The seam of coal being worked is 5 ft. thick, with clay roof and pavement, the strata is horizontal, the cover being 30 ft. in thickness.

The mine is entered by means of drifts 6 ft. high by 6 ft. wide, driven in the coal from the side of a coulee.

The room and pillar system of working is adopted. Entries are driven 5 ft. wide by 5 ft. high, the rooms being 16 ft. wide by 5 ft. high, with pillars between rooms 8 ft. wide by 70 ft. long.

The mine produces 20 tons per day, the mine cars holding 500 lbs.

Paul Werner Billwiller. (Mine No. 321).

Mine Office: Sheerness.

Overman: John K. Ferguson.

Mine Surveyor: Norman Fraser.

Location of Mine: L. S. 7 and 8, Sec. 19, Tp. 29, Rge. 12, West of the 4th Mer.

Area: 60 acres. Character of coal: Lignite.

Owner of Property: Col. James A. Walker, Box 256, Calgary, Alberta.

The seam being worked at this mine has a thickness of 8 ft., with coal roof and hard clay pavement, the strata is level, the cover being 25 ft. in thickness.

The mine is located at Sheerness, 18 miles south-east of Hanna, and is entered by means of a slope, up which the coal is hoisted to the tippie by a steam-driven hoist.

The room and pillar system of working is adopted. Entries are driven 8 ft. wide by 8 ft. high, the rooms being 14 ft. wide by 8 ft. high, with pillars between rooms 12 ft. wide by 70 ft. long.

The plant has a capacity of 60 tons per day, the mine cars holding 1,000 lbs.

The output is all disposed of to farmers from the surrounding district.

Hand Hill Coal Company. (Mine No. 354).

Mine Office: Delia.

Overman: A. F. Joberg.

Mine Surveyor: Norman Fraser.

Location of Mine: N.W.¼ Sec. 21, Tp. 30, Rge. 17, West of the 4th Mer.

Area: 30 acres. Character of coal: Lignite.

Owner of Property: Hand Hill Coal Co., Delia, Alberta.

The seam being worked at this mine has a thickness of 4 ft., with sandstone roof and clay pavement, the strata lies horizontal, the cover being 60 ft. in thickness.

The mine is located in the Hand Hills, 5 miles south of Delia, and is entered by drifts 5 ft. high by 8 ft. wide.

The system of working adopted is room and pillar. Entries are driven 6 ft. wide by 4 ft. high, the rooms being 16 ft. wide by 4 ft. high, with pillars between rooms 10 ft. wide by 40 ft. long.

The mine produces 20 tons per day, the mine cars holding 500 lbs.

The output is disposed of at the mine to farmers from the surrounding district.

Thomas A. Kane. (Mine No. 375).

Mine Office: Garden Plain.

Overman: J. R. Hunter.

Mine Surveyor: Norman Fraser.

Location of Mine: L. S. 7, Sec. 1, Tp. 34, Rge. 14, West of the 4th Mer.

Area: 30 acres. Character of coal: Lignite.

Owner of Property: Thomas A. Kane, Garden Plain, Alberta.

The seam being worked at this mine has a thickness of 4 ft. 8 inches, with sandstone roof and clay pavement, the strata lies in a horizontal position, the cover varying from 20 ft. to 150 ft. in thickness.

The mine is located 25 miles north-east of Hanna, and is entered by drifts 6 ft. high by 6 ft. wide.

The system of working adopted is room and pillar. Entries are driven 6 ft. wide by 6 ft. high, the rooms are driven 14 ft. wide by 4 ft. 8 inches high, with pillars between rooms 12 ft. wide by 60 ft. long.

The mine produces 30 tons of coal per day, the mine cars holding 1,000 lbs.

There is also in operation at this mine a small stripping pit, which is worked during the summer months.

George William Halliday. (Mine No. 380).

Mine Office: Delia.

Overman: John Erickson.

Mine Surveyor: Norman Fraser.

Location of Mine: S.W.¼ Sec. 28, Tp. 30, Rge. 17, West of the 4th Mer.

Area: 30 acres. Character of coal: Lignite.

Owner of Property: Joseph Masciangelo, Delia, Alberta.

This mine is working a seam of coal 3 ft. 6 inches thick, with boney coal roof and clay pavement, the strata lies in a horizontal position, the cover being 75 ft. in thickness.

The mine is located 6 miles south of Delia, and is entered by drifts 5 ft. high by 5 ft. wide.

The room and pillar system of working is adopted. Entries are driven 5 ft. wide by 5 ft. high, the rooms being 13 ft. wide by 3 ft. 6 inches high, with pillars between rooms 12 ft. wide by 50 ft. long.

The output of the mine is 10 tons per day, the mine cars holding 700 lbs.

H. McKenzie. (Mine No. 415).

Mine Office: Parr.

Mine Surveyor: Norman Fraser.

Location of Mine: S.W. $\frac{1}{4}$ Sec. 5, Tp. 29, Rge 14, West of the 4th Mer.

Area: 30 acres. Character of coal: Lignite.

Owner of Property: Ian D. McKenzie, Parr, Alberta.

The seam being worked at this mine has a thickness of 3 ft., with shale roof and clay pavement, the strata lies horizontal, the cover being 10 ft.

This mine is located near Parr, 15 miles south of Hanna. The method of operating is to strip the cover off the coal by means of teams and slip scrapers.

William J. Anderson. (Mine No. 443).

Mine Office: Sheerness.

Overman: Henry Greenfield.

Mine Surveyor: Norman Fraser.

Location of Mine: S.E. $\frac{1}{4}$ Sec. 12, Tp. 29, Rge. 13, West of the 4th Mer.

Area: 40 acres. Character of coal: Lignite.

Owner of Property: William J. Anderson, Sheerness, Alberta.

The seam of coal worked at this mine has a thickness of 8 ft., with coal roof and clay pavement, the strata is level, the cover being 25 ft. in thickness.

The mine is located near Sheerness, and is entered by means of a slope 6 ft. high by 6 ft. 6 inches wide, on an inclination of 11 degrees, the coal being hoisted to the tippie by means of a steam-driven hoist.

The system of working adopted is room and pillar. Entries are driven 8 ft. wide by 8 ft. high, the rooms being 14 ft. wide by 8 ft. high, with pillars between rooms 20 ft. wide by 50 ft. long.

The plant has a capacity of 60 tons per day, the mine cars holding 1,000 lbs.

There is no railroad connection to the mine, the output being disposed of locally to the settlers.

George W. Halliday. (Mine No. 477).

Mine Office: Delia.

Overman: George W. Halliday.

Mine Surveyor: Norman Fraser.

Location of Mine: L. S. 3, Sec. 28, Tp. 30, Rge. 17, West of the 4th Mer.

Area: 30 acres. Character of coal: Lignite.

Owner of Property: Joseph Masciangelo, Delia, Alberta.

The seam being worked at this mine is 3 ft. 6 inches thick, with bone roof and clay pavement, the strata is level, the cover being 38 ft. in thickness.

The mine is located 6 miles south of Delia, and is entered by means of drifts 5 ft. 6 inches high by 6 ft. wide.

The room and pillar system of working is adopted. Entries are driven 10 ft. wide by 4 ft. high, the rooms being 13 ft. wide by 4 ft. high, with pillars between rooms 12 ft. wide by 50 ft. long.

The mine produces 40 tons per day, which is disposed of at the mine to the settlers in the vicinity, the mine cars holding 600 lbs.

Hugh A. Mason. (Mine No. 478).

Mine Office: Delia.

Overman: Henry Brown.

Mine Surveyor: Norman Fraser.

Location of Mine: L. S. 12, Sec. 13, Tp. 30, Rge. 17, West of the 4th Mer.

Character of Coal: Lignite.

Owner of Property: Laura S. Mason, Delia, Alberta.

The seam worked at this mine is 3 ft. 8 inches thick, with clay roof and pavement, the cover is 60 ft. in thickness.

The mine is located 12 miles south-east of Delia, and is entered by means of drifts.

The method of working adopted is room and pillar. Entries are driven 6 ft. wide by 4 ft. high, the rooms being 12 ft. wide by 3 ft. 8 inches high, with pillars between rooms 10 ft. wide by 40 ft. long.

This mine has been abandoned.

Charles E. Brown. (Mine No. 486).

Mine Office: Hanna.

Overman: Charles E. Brown.

Mine Surveyor: Norman Fraser.

Location of Mine: S.W. $\frac{1}{4}$ Sec. 29, Tp. 32, Rge. 13, West of the 4th Mer.

Area: 40 acres.

Character of coal: Lignite.

Owner of Property: Charles E. Brown, Hanna, Alberta.

The seam being worked at this mine has a thickness of 3 ft., with clay roof and sandstone pavement, the cover is 8 ft. thick.

This mine is located 11 miles north-east of Hanna.

This is a stripping proposition located in a coulee, the output being 10 tons per day.

Robert Unsworth. (Mine No. 488).

Mine Office: Garden Plain.

Overman: Robert Unsworth.

Mine Surveyor: Norman Fraser.

Location of Mine: N.W. $\frac{1}{4}$ Sec. 6, Tp. 33, Rge. 13, West of the 4th Mer.

Area: 40 acres.

Character of coal: Lignite.

Owner of Property: Henry Litke, Montana, U.S.A.

The seam being worked at this mine has a thickness of 2 ft. 10 inches, with soapstone roof and sandstone pavement.

The mine is located 16 miles north-east of Hanna, and is entered by slopes 5 ft. high by 4 ft. 6 inches wide by 40 ft. long, on an inclination of 25 degrees, up which the coal is hoisted in mine cars by means of a horse gin.

The room and pillar system of working is adopted. Entries are driven 4 ft. wide by 5 ft. high, the rooms being 14 ft. wide by 3 ft. high, with pillars between rooms 8 ft. wide by 40 ft. long.

The output of the mine is 15 tons per day, the mine cars holding 1,000 lbs.

Kenneth Bryanton. (Mine No. 490).

Mine Office: Garden Plain.

Overman: Kenneth Bryanton.

Mine Surveyor: Norman Fraser.

Location of Mine: N.E. $\frac{1}{4}$ Sec. 18, Tp. 33, Rge. 13, West of the 4th Mer.

Area: 20 acres. Character of coal: Lignite.

Owner of Property: Kenneth Bryanton, Garden Plain, Alberta.

The seam being worked at this mine has a thickness of 3 ft., with soft sandstone roof and clay pavement, the cover is 9 ft. thick.

This is a stripping proposition, the coal being disposed of to the settlers in the neighborhood.

Luck & Sinclair. (Mine No. 491).

Mine Office: Parr.

Overman: George Luck.

Mine Surveyor: Norman Fraser.

Location of Mine: L. S. 16, Sec. 18, Tp. 29, Rge. 14, West of the 4th Mer.

Area: 20 acres. Character of coal: Lignite.

Owner of Property: Luck & Sinclair, Parr, Alberta.

This mine is working a seam of coal 2 ft. 6 inches thick, with soapstone roof and sandstone pavement, the strata is level, the cover being 30 ft. in thickness.

The mine is located 11 miles south of Hanna, and is entered by means of drifts 5½ ft. high by 5 ft. wide driven in the coal from the hillside.

The room and pillar system of working is adopted. The main entry is driven 5 ft. wide by 6 ft. high, side entries are 4 ft. wide by 4 ft. high, the rooms being 12 ft. wide by 2½ ft. high, with pillars between rooms 12 ft. wide by 100 ft. long.

The mine produces 10 tons per day, the mine cars holding 500 lbs. The output is disposed of at the mine to the settlers in the vicinity.

Bert A. Kirkeby. (Mine No. 496).

Mine Office: Dowling Lake.

Overman: Bert A. Kirkeby.

Mine Surveyor: Norman Fraser.

Location of Mine: S.E. $\frac{1}{4}$ Sec. 3, Tp. 33, Rge. 16, West of the 4th Mer.

Area: 30 acres. Character of coal: Lignite.

Owner of Property: Bert. A. Kirkeby, Dowling Lake, Alberta.

The seam being worked at this mine has a thickness of 4 ft. 7 inches, with soft sandstone roof and clay pavement, the strata has a dip of 1% in a westerly direction, the cover being 22 ft. in thickness.

The mine is located near Dowling Lake, 25 miles north-west of Hanna, and is entered by means of drifts 8 ft. high by 6 ft. wide, driven in the hillside.

The room and pillar system of working is adopted. Entries are driven 6 ft. wide by 5 ft. high, the rooms being 14 ft. wide by 4 ft. 6 inches high, with pillars between rooms 12 ft. wide by 60 ft. long.

The mine produces 30 tons per day, the mine cars holding 1,000 lbs. The output is disposed of to the settlers in the vicinity.

Samuel Wadsworth. (Mine No. 497).

Mine Office: Hanna.

Overman: Samuel Wadsworth.

Mine Surveyor: Norman Fraser.

Location of Mine: S.E. $\frac{1}{4}$ Sec. 19, Tp. 29, Rge. 14, West of the 4th Mer.

Area: 20 acres. Character of coal: Lignite.

Owner of Property: Samuel Wadsworth, Box 69, Hanna, Alberta.

The seam being worked at this mine has a thickness of 3 ft., with soapstone roof and rock pavement, the strata is level, the cover being 60 ft. in thickness.

The mine is located south-east of Hanna, and is entered by drifts 3 ft. 8 inches high by 5 ft. wide.

The room and pillar system of working is adopted. Entries are driven 6 ft. wide by 3 ft. 9 inches high, the rooms being 12 ft. wide by 3 ft. 9 inches high, with pillars between rooms 12 ft. wide by 170 ft. long.

The mine produces 30 tons per day, the mine cars holding 500 lbs.

The output is disposed of at the mine to the settlers in the vicinity.

George Purdy. (Mine No. 611).

Mine Office: Hanna.

Overman: George Purdy.

Mine Surveyor: Norman Fraser.

Location of Mine: S.W. $\frac{1}{4}$ Sec. 29, Tp. 32, Rge. 13, West of the 4th Mer.

Area: 40 acres. Character of coal: Lignite.

Owner of Property: George Purdy, Hanna, Alberta.

This mine is located 11 miles north-east of Hanna, and is a strip-ping proposition, the coal seam averaging 3 ft. in thickness with 8 ft. of cover, which is composed of clay, the pavement being sandstone.

The output, which is 20 tons per day, is disposed of to the settlers.

Charles A. McLean. (Mine No. 612).

Mine Office: Wildunn.

Mine Surveyor: Norman Fraser.

Location of Mine: L. S. 2, Sec. 6, Tp. 30, Rge. 13, West of the 4th Mer.

Area: 20 acres. Character of coal: Lignite.

Owner of Property: Charles A. McLean, Wildunn, Alberta.

This is a stripping proposition located 13 miles south-east of Hanna.

The coal seam is 20 inches thick, with clay roof and pavement, the cover being 4 ft. in thickness. It is now abandoned.

Athol L. Ployart. (Mine No. 626).

Mine Offices: Parr.

Overman: Athol L. Ployart.

Mine Surveyor: Norman Fraser.

Location of Mine: S.E.¼ Sec. 6, Tp. 29, Rge. 14, West of the 4th Mer.

Area: 20 acres. Character of coal: Lignite.

Owner of Property: Ella Grace Ployart, Sandwick, B.C.

This mine is located 14 miles south-west of Hanna, and is a stripping proposition, the coal seam averaging 2 ft. 6 inches thick, with shale roof and sand-rock pavement, the strata lies in a horizontal position, the cover being 12 ft. in thickness.

Robert Stewart. (Mine No. 636).

Mine Office: Della.

Overman: Robert Stewart.

Mine Surveyor: Norman Fraser.

Location of Mine: Sec. 6, Tp. 30, Rge. 17, West of the 4th Mer.

Area: 20 acres. Character of coal: Lignite.

Owner of Property: Robert Stewart, Delia, Alberta.

The seam being worked at this mine has a thickness of 4 ft., with sandstone roof and clay pavement, the strata is level, the cover being 50 ft. in thickness.

The mine is entered by means of drifts 6 ft. wide by 4 ft. high.

The room and pillar system of working is adopted. Entries are driven 6 ft. wide by 4 ft. high, the rooms being 12 ft. wide by 4 ft. high, with pillars between rooms 10 ft. wide by 30 ft. long.

The output of the mine is 15 tons per day, the mine cars holding 500 lbs.

Harry Trentham. (Mine No. 646).

Mine Office: Garden Plain.

Overman: Harry Trentham.

Mine Surveyor: Norman Fraser.

Location of Mine: S.W.¼, L. S. 1, Sec. 1, Tp. 34, Rge. 14, West of the 4th Mer.

Area: 30 acres. Character of coal: Lignite.

Owner of Property: Harry Trentham, Garden Plain, Alberta.

The seam being worked at this mine has a thickness of 5 ft., with shale roof and clay pavement, the strata is horizontal, the cover being 30 ft. in thickness.

The mine is entered by means of drifts 5½ ft. high by 6 ft. wide.

The system of working adopted is room and pillar. Entries are driven 6 ft. wide by 5½ ft. high, the rooms being 14 ft. wide by 5 ft. high, with pillars between rooms 12 ft. wide by 50 ft. long.

The mine has a capacity of 30 tons per day, the mine cars holding 1,000 lbs.

LACOMBE DISTRICT.—DISTRICT NO. 18.

William Penman. (Mine No. 166).

Mine Office: Alix.

Overman: William Penman.

Mine Surveyor: Norman Fraser.

Location of Mine: S.W.¼ Sec. 34, Tp. 38, Rge. 23, West of the 4th Mer.

Area: 20 acres. Character of coal: Lignite.

Owner of Property: J. P. Dweaks, Alix, Alberta.

The upper seam, which is the only one being worked at this mine, has a thickness of 4 ft., with coal roof and blue rock pavement, the strata is practically level, the cover being 40 ft. in thickness.

The mine is located 6 miles south of Alix, on the north bank of the Red Deer river, and is entered by drifts, 7 ft. high by 8 ft. wide.

The room and pillar system of working is adopted. Entries are driven 8 ft. wide by 7 ft. high, the rooms being 16 ft. wide by 4 ft. high, with pillars between rooms 12 ft. wide by 75 ft. long.

The coal is hoisted to the tippie over a surface incline (built on the face of the bank) by means of a horse gin.

The capacity of the plant is 25 tons per day, the mine cars holding 500 lbs.

Mackay & McIntosh. (Mine No. 167).

Mine Office: Nevis.

Overman: Donald MacKay.

Mine Surveyor: Norman Fraser.

Location of Mine: S.E.¼ Sec. 11, Tp. 39, Rge. 22, West of the 4th Mer.

Area: 200 acres. Character of coal: Lignite.

Owner of Property: Imperial Canadian Trust Co., Ltd., Calgary, Alta.

The seam being worked at this mine has a thickness of 4 ft., with shale roof and clay pavement, the strata is practically level, the cover being 120 ft. in thickness.

The mine is located in a valley 2 miles west of Nevis, a short spur connecting the tippie with the Lacombe branch of the C.P.R. The mine is entered by drifts driven in the coal from the face of the hillside.

The room and pillar system of working has been adopted. Entries are driven 8 ft. wide by 6 ft. high, the rooms being 16 ft. wide by 4 ft. high, with pillars between rooms 20 ft. wide by 60 ft. long.

The coal is hoisted to the tippie over a surface incline by a steam hoist.

The plant has a capacity of 70 tons per day, the mine cars holding 1,000 lbs.

Carl G. Hilker. (Mine No. 212).

Mine Office: Halkirk.

Overman: Carl G. Hilker.

Mine Surveyor: Norman Fraser.

Location of Mine: N.W.¼ Sec. 8, Tp. 39, Rge. 15, West of the 4th Mer.

Area: 40 acres. Character of coal: Lignite.

Owner of Property: Carl G. Hilker, Halkirk, Alberta.

The seam being worked at this mine has a thickness of 6 ft., with soft sandstone roof and hard sandstone pavement, the strata is practically level, with a cover of 85 ft. in thickness.

The mine is located in a coulee 5 miles north-east of Halkirk, and is entered by means of a drift driven in coal from the face of the bank.

The mine is worked on the room and pillar system. Entries are driven 6 ft. high by 6 ft. wide, the rooms being 14 ft. wide by 6 ft. high, with pillars 14 ft. wide by 50 ft. long.

The mine has a capacity of 200 tons per day, the mine cars holding 1,500 lbs.

The output is hauled by teams and loaded on railway cars at Halkirk for shipment.

A. D. McCormack. (Mine No. 246).

Mine Office: Castor.

Overman: A. D. McCormack.

Mine Surveyor: Norman Fraser.

Location of Mine: L. S. 14, Sec. 34, Tp. 37, Rge. 14, West of the 4th Mer.

Area: 320 acres. Character of coal: Lignite.

Owner of Property: A. D. McCormack, Castor, Alberta.

The seam being worked at this mine has a thickness of 5 ft. 6 inches, with clay roof and sandstone pavement, the strata is practically level, the cover being 25 ft. in thickness.

The mine is located in a coulee 1½ miles west of Castor, and is entered by means of a drift 5 ft. 6 inches high by 6 ft. wide.

The room and pillar system of working is adopted. Entries are driven 7 ft. wide by 5 ft. 6 inches high, the rooms being 16 ft. wide by 5 ft. 6 inches high, with pillars between rooms 10 ft. wide by 60 ft. long.

The haulage is by means of horses, the capacity of plant being 75 tons per day, the mine cars holding 1,000 lbs.

The output is hauled to Castor and loaded on railway cars for shipment.

Strader & Green. (Mine No. 268).

Mine Office: Halkirk.

Location of Mine: S.E.¼ Sec. 18, Tp. 39, Rge. 15, West of the 4th Mer.

Area: 60 acres. Character of coal: Lignite.

Owner of Property: Strader & Green, Halkirk, Alberta.

The seam of coal worked at this mine has a thickness of 5 ft. 6 inches, with soapstone roof and clay pavement, the strata is practically level, the cover being 40 ft. in thickness.

The mine is entered by means of drifts 5 ft. 6 inches high by 7 ft. wide.

The system of working is room and pillar. Entries are driven 7 ft. wide by 5 ft. 6 inches high, the rooms being 15 ft. wide by 5 ft. 6 inches high, with pillars between rooms 12 ft. wide by 60 ft. long.

No work has been done at this mine during the year, and it is now abandoned.

Davis & Green. (Mine No. 273).

Mine Office: Halkirk.
Overman: W. J. Davis.
Mine Surveyor: Norman Fraser.
Location of Mine: S.W. $\frac{1}{4}$ Sec. 18, Tp. 39, Rge. 15, West of the 4th Mer.
Area: 20 acres. Character of coal: Lignite.
Owner of Property: Davis & Green, Halkirk, Alberta.

This mine is working a seam of coal 4 ft. 6 inches thick, with clay roof and pavement, the strata lies practically level, the cover being 85 ft. in thickness.

The mine is located in a coulee 4 miles north-east of Halkirk, and is entered by drifts 5 ft. high by 6 ft. wide.

The system of working adopted is room and pillar. Entries are driven 6 ft. wide by 5 ft. high, the rooms being 12 ft. wide by 4 ft. high, with pillars between rooms 12 ft. wide by 60 ft. long.

The capacity of the mine is 20 tons per day, the mine cars holding 1,000 lbs.

National Coal Company. (Mine No. 275).

Mine Office: Castor.
Head Office: Prince Albert, Saskatchewan.
Manager: Thomas Horne.
Mine Surveyor: Thomas Horne.
Location of Mine: N.W. $\frac{1}{4}$ Sec. 3, Tp. 38, Rge. 14, West of the 4th Mer.
Area: 773 acres. Character of coal: Lignite.
Owner of Property: National Coal Co., Castor, Alberta.

The seam which is being worked at this mine has a thickness of 5 ft. 6 inches, with clay roof and sandstone pavement, the strata is practically level, the cover being 20 ft. in thickness.

The mine is located 2 miles west of Castor, and is connected to the Lacombe branch of the C.P.R. by means of a short spur. The mine is entered by drifts 5 ft. 6 inches high by 6 ft. wide.

The room and pillar system of working is adopted. Entries are driven 6 ft. wide by 5 ft. 6 inches high, the rooms are 14 ft. wide by 5 ft. 6 inches high, with pillars between rooms 17 ft. wide by 120 ft. long.

Haulage is done by horses. The plant has a capacity of 150 tons per day, the mine cars holding 1,000 lbs.

The mine cars are hoisted up a short slope on the surface to the tipple by a steam-driven hoist.

Herbert Baines. (Mine No. 288).

Mine Office: Gadsby, Alberta.
Mine Surveyor: Norman Fraser.
Location of Mine: S.E. $\frac{1}{4}$ Sec. 28, Tp. 39, Rge. 16, West of the 4th Mer.
Area: 30 acres. Character of coal: Lignite.
Owner of Property: Herbert Baines, Gadsby, Alberta.

This mine is working a seam of coal which has a thickness of 4 ft., with shale roof and clay pavement, the strata lies practically level, the cover being 50 ft. in thickness.

The mine is located $8\frac{1}{2}$ miles north-west of Gadsby, in a coulee, and is entered by a slope 6 ft. high by 6 ft. wide by 60 ft. long, on an inclination of 10%, up which the mine cars are hauled to the chute by a horse.

The room and pillar system of working is adopted. Entries are driven 6 ft. wide by 5 ft. high, the rooms being 16 ft. wide by 4 ft. high, with pillars between rooms 12 ft. wide by 60 ft. long.

The capacity of the plant is 30 tons per day, the mine cars holding 1,000 lbs.

Armour Gray. (Mine No. 289).

Mine Office: Gadsby, Alberta.

Overman: Armour Gray.

Mine Surveyor: Norman Fraser.

Location of Mine: N.E. $\frac{1}{4}$ Sec. 28, Tp. 39, Rge. 16, West of the 4th Mer.

Area: 160 acres. Character of coal: Lignite.

Owner of Property: Armour Gray, Gadsby, Alberta.

The seam being worked at this mine has a thickness of 4 ft., with soft sandstone roof and shale pavement, the strata is practically horizontal, the cover being 45 ft. in thickness.

This mine is located in a coulee north of Gadsby, and is entered by a slope 4 ft. high by 4 ft. wide by 50 ft. long, on an inclination of 11 degrees, up which the coal is hauled by a horse.

The room and pillar system of working is adopted. Entries are driven 4 ft. high by 4 ft. wide, the rooms being 15 ft. wide by 4 ft. high, with pillars between rooms 20 ft. wide by 60 ft. long.

The mine has a capacity of 30 tons per day, the mine cars holding 700 lbs.

Joseph Wagner. (Mine No. 291).

Mine Office: Gadsby.

Overman: Joseph Wagner.

Mine Surveyor: Norman Fraser.

Location of Mine: S.W. $\frac{1}{4}$, Sec. 28, Tp. 39, Rge. 16, West of the 4th Mer.

Area: 40 acres. Character of coal: Lignite.

Owner of Property: Joseph Wagner, Gadsby, Alberta.

The seam being worked at this mine has a thickness of 5 ft., with shale roof and clay pavement, the strata is practically level, the cover being 40 ft. in thickness.

The mine is located $8\frac{1}{2}$ miles north-west of Gadsby, and is entered by a slope 5 ft. high by 8 ft. wide on an inclination of 10%, up which the coal is hauled by a horse.

The room and pillar system of working is adopted. Entries are driven 8 ft. wide by 5 ft. high, the rooms are 14 ft. wide by 5 ft. high, with pillars between rooms 10 ft. wide by 60 ft. long.

The mine has a capacity of 25 tons per day, the mine cars holding 500 lbs.

Hugh McLean. (Mine No. 304).

Mine Office: Castor.

Overman: A. B. Brown.

Mine Surveyor: Thomas Horne.

Location of Mine: S.E.¼, Sec. 34, Tp. 37, Rge. 14, West of the 4th Mer.

Area: 160 acres. Character of coal: Lignite.

Owner of Property: Hugh McLean, Castor, Alberta.

The seam being worked at this mine has a thickness of 4 ft., with clay roof and sandstone pavement, the strata is practically horizontal, the cover being 21 ft. in thickness.

The mine is located near Castor, and is entered by means of shafts. The hoisting shaft has two compartments, each 6 ft. wide by 6 ft. 6 inches long by 21 ft. deep.

The room and pillar system of working is adopted. Entries are driven 6 ft. wide by 5½ ft. high, the rooms being 12 ft. wide by 4 ft. high, with pillars between rooms 6 ft. wide by 50 ft. long.

The plant has a capacity of 100 tons per day, the mine cars holding 800 lbs.

The mine cars are hoisted to the tipple by means of a horse gin.

The output of the mine is disposed of locally.

Russian Coal Co. (Mine No. 325).

Mine Office: Castor.

Overman: John Melnek.

Mine Surveyor: Norman Fraser.

Location of Mine: E½ L. S. 8, Sec. 4, Tp. 38, Rge. 14, West of the 4th Mer.

Area: 160 acres. Character of coal: Lignite.

Owner of Property: Russian Coal Co., Castor, Alberta.

The seam which is being worked at this mine has a thickness of 5 ft. 6 inches, with clay roof and sandstone pavement, the strata is practically level, the cover being 35 ft. in thickness.

The mine is located near Castor, and is entered by means of shafts, the hoisting shaft having two compartments, each 5 ft. 9 inches wide by 6½ ft. long by 35 ft. deep.

The method of working adopted is room and pillar. Entries are driven 6 ft. wide by 5½ ft. high, the rooms being 16 ft. wide by 5½ ft. high, with pillars between rooms 8 ft. wide by 60 ft. long.

The coal is hoisted to the tipple level by means of a horse gin.

The plant has a capacity of 25 tons per day, the output being hauled to Castor by teams and loaded in railway cars.

John Heney. (Mine No. 329).

Mine Office: Castor.

Overman: John Heney.

Mine Surveyor: Thomas Horne.

Location of Mine: N.E.¼, Sec. 4, Tp. 38, Rge. 14, West of the 4th Mer.

Area: 160 acres. Character of coal: Lignite.

Owner of Property: John Heney, Castor, Alberta.

The seam being worked has a thickness of 5 ft. 6 inches, with clay roof and sandstone pavement, the strata is practically level, the cover being 25 ft. in thickness.

The mine is located near Castor, and is entered by an open cut slope 8 ft. wide on an inclination of 15%, up which the mine cars are hauled to the tippie by a horse.

The room and pillar system of working is adopted. Entries are driven 6 ft. wide by 5 ft. 6 inches high, with pillars 10 ft. wide by 60 ft. long.

The capacity of the plant is 30 tons per day, the mine cars holding 1,200 lbs.

Cable Brothers & Williams. (Mine No. 387).

Mine Office: Gadsby.

Overman: A. E. H. Cable.

Location of Mine: N.W. $\frac{1}{4}$, Sec. 28, Tp. 39, Rge. 16, West of the 4th Mer.

Area: 80 acres. Character of coal: Lignite.

Owner of Property: A. E. H. Cable, Gadsby, Alberta.

The seam worked at this mine has a thickness of 4 ft. 6 inches, with shale roof and clay pavement, the strata is practically level, the cover being 20 ft. in thickness.

The mine is located 9 miles north of Gadsby, and is entered by a slope 7 ft. wide by 5 ft. high by 40 ft. long, on an inclination of 8%, up which the cars are hauled by a horse gin.

The room and pillar system of working is adopted. Entries are driven 7 ft. wide by 5 ft. high, the rooms being 14 ft. wide by 4 ft. 6 inches high, with pillars between rooms 12 ft. wide by 60 ft. long.

There has been no work done during the year, the mine being now abandoned.

George Davies. (Mine No. 417).

Mine Office: Castor.

Overman: George Davies.

Mine Surveyor: Norman Fraser.

Location of Mine: N.E. $\frac{1}{4}$, Sec. 26, Tp. 37, Rge. 14 West of the 4th Mer.

Area: 40 acres. Character of coal: Lignite.

Owner of Property: Robert D. Travers, Vancouver, B. C.

The seam of coal being worked at this mine has a thickness of 5 ft. with clay roof and sandstone pavement, the strata is practically level, the cover being 16 ft. in thickness.

The mine is located 1 mile east of Castor, and is entered by a drift 5 ft. high by 6 ft. wide driven in from the coulee.

The system of working adopted is room and pillar. Entries are driven 6 ft. wide by 5 ft. high, the rooms are 14 ft. wide by 5 ft. high, with pillars between rooms 12 ft. wide by 60 ft. long.

The capacity of the mine is 20 tons per day, the mine cars holding 1,000 lbs.

This mine is only operated during the winter months.

Benjamin Hronek. (Mine No. 427).

Mine Office: Halkirk.

Overman: Benjamin Hronek.

Mine Surveyor: Norman Fraser.

Location of Mine: S.W.¼, L. S. 7, Sec. 18, Tp. 39, Rge. 15, West of the 4th Mer.

Area: 40 acres.

Character of Coal: Lignite.

Owner of Property: Benjamin Hronek, Halkirk, Alberta.

The seam of coal being worked at this mine has a thickness of 6 ft. 6 inches, with clay roof and pavement, the strata lies practically level, the cover being 85 ft. in thickness.

The mine is located in a coulee 4 miles north of Halkirk, and is entered by means of drifts 6 ft. 6 inches high by 6 ft. wide.

The system of working adopted is room and pillar. Entries are driven 6 ft. wide by 6 ft. 6 inches high, the rooms being 12 ft. wide by 6 ft. 6 inches high, with pillars between rooms 14 ft. wide by 60 ft. long.

Storage bunkers having a capacity of 50 tons are built near the entrance to the mine, the output of which is hauled by teams to Halkirk, where it is loaded on railway cars for shipment. The capacity of the plant is 100 tons per day, the mine cars holding 1,000 lbs.

Carl Linder. (Mine No. 411).

Mine Office: Halkirk.

Overman: Halvor Norheim.

Mine Surveyor: Norman Fraser.

Location of Mine: S.W.¼, Sec. 18, Tp. 39, Rge. 15, West of the 4th Mer.

Area: 20 acres.

Character of coal: Lignite.

Owner of Property: Carl Linder, Halkirk, Alberta.

The seam which is being worked at this mine has a thickness of 4 ft. 6 inches, with clay roof and pavement, the strata is practically level, the cover being 80 ft. in thickness.

The mine is located 4½ miles north-west of Halkirk in a coulee, and is entered by a drift driven in the coal 6 ft. high by 6 ft. wide.

The system of working adopted is room and pillar. Entries are driven 6 ft. wide by 6 ft. high, the rooms are 12 ft. wide by 4 ft. 6 inches high, with pillars between rooms 14 ft. wide by 60 ft. long.

The capacity of the mine is 70 tons per day, the mine cars holding 1,000 lbs.

The output of the mine is hauled to Halkirk and loaded in railway cars for shipment to points in Saskatchewan.

Frank Meheltz. (Mine No. 451).

Mine Office: Halkirk.

Overman: Frank Meheltz.

Mine Surveyor: Norman Fraser.

Location of Mine: S.E.¼, Sec. 11, Tp. 39, Rge. 16, West of the 4th Mer

Area: 20 acres.

Character of coal: Lignite.

Owner of Property: Louis Bergren, Halkirk, Alberta.

The seam being worked at this mine has a thickness of 4 ft., with clay roof and pavement, the strata is practically level, the cover having an average thickness of 26 ft.

The mine is located 6 miles north-west of Halkirk, and is entered by drifts 5 ft. high by 5 ft. wide.

The room and pillar system of working is adopted. Entries are driven 5 ft. wide by 5 ft. high, the rooms being 4 ft. wide by 4 ft. high, with pillars between rooms 20 ft. wide by 50 ft. long.

The output of the mine is disposed of in Halkirk, the capacity of the plant being 50 tons per day, the mine cars holding 700 lbs.

Irving Smithson. (Mine No. 494).

Mine Office: Halkirk.

Overman: Irving Smithson.

Mine Surveyor: Norman Fraser.

Location of Mine: N.E.¼, L. S. 5, Sec. 20, Tp. 37, Rge. 15, West of the 4th Mer.

Area: 30 acres. Character of coal: Lignite.

Owner of Property: Irving Smithson, Halkirk, Alberta.

The seam being worked at this mine has a thickness of 2 ft. 6 inches, with clay roof and pavement, the strata is practically level, the cover being 5 ft. in thickness.

This is a stripping proposition, and is located 7 miles south-west of Halkirk.

The output, which is small, is disposed of to the settlers in the vicinity.

Marvin M. Carter. (Mine No. 498).

Mine Office: Halkirk.

Mine Surveyor: Norman Fraser.

Location of Mine: N.E.¼, Sec. 6, Tp. 37, Rge. 15, West of the 4th Mer.

Area: 20 acres. Character of coal: Lignite.

Owner of Property: Marvin M. Carter, Halkirk, Alberta.

The seam being worked at this mine has a thickness of 2 ft. 4 inches, with soapstone roof and clay pavement, the strata is practically level, the cover being 8 ft. in thickness.

This is a stripping proposition, located 11 miles south of Halkirk, and is worked on a small scale, the output, which is from 5 to 10 tons per day, being disposed of to the settlers in the vicinity.

Andrew Richmond. (Mine No. 608).

Mine Office: Erskine.

Overman: Andrew Richmond.

Location of Mine: S.E.¼, Sec. 10, Tp. 38, Rge. 22, West of the 4th Mer.

Area: 80 acres. Character of coal: Lignite.

Owner of Property: Andrew Richmond, Erskine, Alberta.

The seam worked at this mine has a thickness of 5 ft., with sandstone roof and clay pavement, the strata is practically level, the cover being 30 ft. in thickness.

The mine is entered by a drift 5 ft. high by 8 ft. wide.

The room and pillar system of working is adopted. Entries are driven 8 ft. wide by 5 ft. high, the rooms being 14 ft. wide by 5 ft. high, with pillars between rooms 12 ft. wide by 50 ft. long.

Very little work has been done during the year, and it is now abandoned.

Moreland Brothers. (Mine No. 617).

Mine Office: Stettler.

Overman: James W. Moreland.

Mine Surveyor: Norman Fraser.

Location of Mine: Sec. 24, Tp. 37, Rge. 22, West of the 4th Mer.

Area: 40 acres. Character of coal: Lignite.

Owner of Property: Richard Moreland, Stettler, Alberta.

The seam which was worked at this mine has a thickness of 4 ft., with shale roof and clay pavement, the strata is practically level, the cover being 30 ft. in thickness.

The mine is located 16 miles south-west of Stettler, and is entered by means of drifts 4½ ft. high by 6 ft. wide.

The system of working adopted is room and pillar. Entries are driven 6 ft. wide by 4½ ft. high, the rooms being 14 ft. wide by 4 ft. high, with pillars between rooms 12 ft. wide by 60 ft. long.

The mine is now abandoned.

Herbert Baines. (Mine No. 660).

Mine Office: Gadsby.

Overman: Herbert Baines.

Mine Surveyor: Norman Fraser.

Location of Mine: S.E.¼, Sec. 28, Tp. 39, Rge. 16, West of the 4th Mer.

Area: 50 acres. Character of coal: Lignite.

Owner of Property: Herbert Baines, Gadsby, Alberta.

The seam being worked at this mine has a thickness of 5 ft., with soapstone roof and clay pavement, the seam is practically level, the cover being 30 ft. in thickness.

The mine is located 8 miles north of Gadsby, and is entered by a slope 5 ft. high by 8 ft. wide by 50 ft. long, on an inclination of 8%, up which the cars are hauled to the tippie by a horse.

The room and pillar system of working is adopted. Entries are driven 8 ft. wide by 5 ft. high, the rooms being 20 ft. wide by 5 ft. high, with pillars between rooms 10 ft. wide by 60 ft. long.

The capacity of the plant is 40 tons per day, the mine cars holding 1,000 lbs.

McTaggart & Morton. (Mine No. 661).

Mine Office: Erskine.

Overman: Steven Gfrodo.

Location of Mine: N.E.¼, Sec. 33, Tp. 38, Rge. 22, West of the 4th Mer.

Area: 60 acres. Character of coal: Lignite.

Owner of Property: McTaggart & Morton, Erskine, Alberta.

The seam which is being worked at this mine has a thickness of 6 ft., with sandstone roof and clay pavement, the strata is practically level, the cover being 80 ft. in thickness.

The mine is entered by means of a drift 6 ft. high by 8 ft. wide.

The system of working adopted is room and pillar. Entries are driven 8 ft. wide by 6 ft. high, the rooms being 14 ft. wide by 6 ft. high, with pillars between rooms 12 ft. wide by 50 ft. long.

The plant has a capacity of 25 tons per day, the mine cars holding 700 lbs.

TROCHU DISTRICT.—DISTRICT No. 19.

T. D. Conger. (Mine No. 255).

Mine Office: Gaetz Valley.

Overman: T. D. Conger.

Location of Mine: S.W.¼, Sec. 17, Tp. 38, Rge. 23, West of the 4th Mer.

Area: 40 acres. Character of coal: Lignite.

Owner of Property: T. D. Conger, Gaetz Valley, Alberta.

The seam being worked at this mine has a thickness of 6 ft., with soapstone roof and clay pavement, the seam lies practically level, the cover being 12 to 20 ft. in thickness.

This is a stripping proposition, which is only worked during the winter months, the output being disposed of locally to the settlers.

The mine is located on the banks of the Red Deer river, south-west of Alix.

William R. Walsh. (Mine No. 314).

Mine Office: Ardley.

Head Office: 35 Lineham Block, Calgary, Alberta.

Authorized Capital: \$300,000.00.

President: Col. James A. Walker.

Vice-President: W. Egbert, M.D.

Directors: John Gillespie, William H. Gilmour, E. B. Williams, William Gillespie.

Sec.-Treas.: D. G. Lamont.

General Manager: Col. Walker.

Overman: William R. Walsh.

Mine Surveyor: Norman Fraser.

Location of Mine: S.E.¼, Sec. 29, Tp. 38, Rge. 23, West of the 4th Mer.

Area: 2,440 acres. Character of coal: Lignite.

Owner of Property: Calgary Collieries, Ltd.

Address of Owner: 35 Lineham Block, Calgary, Alberta.

The seam being worked at this mine has a thickness of 6 ft., with bone and coal roof and shale pavement, the strata has a dip of 2 degrees in a south-easterly direction, the cover being 91 ft. in thickness.

The mine is located near Ardley, on the Edmonton-Calgary branch of the G.T.P., to which it is connected by a short spur, and is entered by a number of drifts 6 ft. high by 6 ft. wide, driven in from the river bank.

The system of working adopted at this mine is room and pillar. Entries are driven 8 ft. wide by 6 ft. high, the rooms being 16 ft. wide by 6 ft. high, with pillars between rooms 14 ft. wide by 60 ft. long.

The coal is undermined by coal-cutting machines of the Rand-Radial post type operated by compressed air.

The plant has a capacity of 200 tons per day, the mine cars holding 2,000 lbs.

The mine cars are hoisted to the tippie level over a surface incline (350 ft. long on an inclination of 25 degrees) by a steam-driven hoist.

A wash-house has been built for the use of employees.

David Halbert. (Mine No. 315).

Mine Office: Trochu.

Manager: James Finlayson.

Overman: David Halbert.

Mine Surveyor: Norman Fraser.

Location of Mine: S.E. $\frac{1}{4}$, Sec. 14, Tp. 33, Rge. 23, West of the 4th Mer.

Area: 40 acres. Character of coal: Lignite.

Owner of Property: David Halbert, Trochu, Alberta.

The seam which is being worked at this mine has a thickness of 5 ft. 6 in., with coal roof and clay pavement, the strata lies practically level, the cover being 80 ft. in thickness.

The mine is located 3 miles east of Trochu, and is entered by means of slopes 6 ft. high by 6 ft. wide by 100 ft. long on an inclination of 15%.

The room and pillar system of working is adopted. Entries are driven 6 ft. wide by 6 ft. high, the rooms being 12 ft. wide by 5 ft. high, with pillars between rooms 12 ft. wide by 50 ft. long.

The haulage on the slope is by horses, the plant having a capacity of 50 tons per day, the mine cars holding 1,000 lbs. The output is disposed of in Trochu and to the settlers in the vicinity.

George C. Yard. (Mine No. 328).

Mine Office: Huxley.

Overman: George C. Yard.

Mine Surveyor: Norman Fraser.

Location of Mine: S.W. $\frac{1}{4}$, Sec. 13, Tp. 34, Rge. 22, West of the 4th Mer.

Area: 40 acres. Character of coal: Lignite.

Owner of Property: George C. Yard, Huxley, Alberta.

The seam being worked at this mine has a thickness of 5 ft. 8 inches, with sandstone roof and clay pavement, the strata is practically level, the cover being 70 ft. in thickness.

The mine is located near the west bank of the Red Deer river, 10 miles east of Huxley, and is entered by slopes 5 ft. high by 7 ft. wide by 108 ft. long, on an inclination of 15 degrees.

The room and pillar system of working is adopted. Entries are driven 7 ft. wide by 5 ft. high, the rooms being 14 ft. wide by 5 ft. high, with pillars between rooms 12 ft. wide by 50 ft. long.

The capacity of the plant is 30 tons per day, the mine cars holding 1,000 lbs.

George C. Yard. (Mine No. 337).

Mine Office: Trochu.

Overman: Alexander W. McKinlay.

Mine Surveyor: Norman Fraser.

Location of Mine: S.W. $\frac{1}{4}$ Sec. 10, Tp. 34, Rge. 22, West of the 4th Mer.

Area: 40 acres. Character of coal: Lignite.

Owner of Property: Alexander W. McKinlay, Trochu, Alberta.

The seam which was worked at this mine, has a thickness of 4 ft., with soapstone roof and clay pavement, the strata is practically level, the cover being 50 to 150 ft. in thickness.

The mine is located in a coulee off the Red Deer river, 18 miles north of Trochu, and is entered by drifts 5 ft. high by 6 ft. wide.

The room and pillar system of working is adopted. Entries are driven 6 ft. wide by 5 ft. high, the rooms being 12 ft. wide by 4 ft. high, with pillars between rooms 10 ft. wide by 50 ft. long.

The capacity of the plant is 20 tons per day, the mine cars holding 1,200 lbs.

Very little work has been done at this mine during the year, and it is now abandoned.

Loiselle & Heinke. (Mine No. 423).

Mine Office: Trochu.

Location of Mine: N.E. $\frac{1}{4}$, Sec. 22, Tp. 33, Rge. 22, West of the 4th Mer.

The seam being worked has a thickness of 5 ft., with clay roof and pavement, the strata is practically level, the cover being 70 ft. in thickness.

There has been very little work done at this mine during the year.

William Halbert. (Mine No. 426).

Mine Office: Trochu.

Overman: William Halbert.

Mine Surveyor: Norman Fraser.

Location of Mine: N.E. $\frac{1}{4}$, Sec. 12, Tp. 33, Rge. 23, West of the 4th Mer.

Area: 40 acres. Character of coal: Lignite.

Owner of Property: Henry B. Johnstone, Trochu, Alberta.

The seam which is being worked at this mine has a thickness of 6 ft., with clay roof and pavement, the strata lies practically level, the cover being 12 to 75 ft. in thickness.

The mine is located 5 miles east of Trochu, and is entered by a slope 6 ft. wide by 6 ft. high by 20 ft. long, driven in from the foot of a hill.

The room and pillar system of working is adopted. Entries are driven 5 ft. wide by 5 ft. high, the rooms are 10 ft. wide by 5 ft. high, with pillars between rooms 40 ft. square.

The mine has a capacity of 30 tons per day, the mine cars holding 1,000 lbs.

The output is disposed of to the settlers in the vicinity.

Ole Thompson. (Mine No. 495).

Mine Office: Breda.

Overman: L. H. S. Kerkeberg.

Mine Surveyor: Norman Fraser.

Location of Mine: N.E.¼, Sec. 12, Tp. 36, Rge. 22, West of the 4th Mer.

Area: 20 acres.

Character of coal: Lignite.

Owner of Property: Ole Thompson, Breda, Alberta.

The seam of coal being worked at this mine has a thickness of 3 ft. 6 inches, with shale roof and hard clay pavement, the seam is practically level, the cover being 41 ft. in thickness.

The mine is located 15 miles south-east of Lousana, and is entered by drifts 5 ft. high by 8 ft. wide.

The method of working adopted is room and pillar. Entries are driven 8 ft. wide by 5 ft. high, the rooms being 16 ft. wide by 4 ft. high, with pillars between rooms 16 ft. wide by 70 ft. long.

The plant has a capacity of 30 tons per day, the mine cars holding 1,000 lbs.

Very little work has been done during the year.

Matthew Ball. (Mine No. 619).

Mine Office: Breda.

Overman: Matthew Ball.

Mine Surveyor: Norman Fraser.

Location of Mine: N.E.¼, Sec. 10, Tp. 35, Rge. 21, West of the 4th Mer.

Area: 60 acres.

Character of coal: Lignite.

Owner of Property: Matthew Ball, Breda, Alberta.

The seam which was worked at this mine has a thickness of 5 ft., with clay roof and pavement, the strata lies practically level, the cover being from 10 to 40 ft. in thickness.

The mine is located near Breda, and is entered by drifts 5 ft. high by 8 ft. wide.

The system of working adopted is room and pillar. Entries are driven 8 ft. wide by 5 ft. high, the rooms being 12 ft. wide by 5 ft. high, with pillars between rooms 14 ft. wide by 50 ft. long.

There has been very little work done at this mine during the year, and it is now abandoned, owing to the coal proving worthless.

D. R. Gordon. (Mine No. 623).

Mine Office: Trochu.

Overman: D. R. Gordon.

Location of Mine: S.W.¼, Sec. 32, Tp. 33, Rge. 22, West of the 4th Mer.

Area: 100 acres.

Character of coal: Lignite.

Owner of Property: D. R. Gordon, Trochu, Alberta.

The seam worked at this mine has a thickness of 5 ft., with soapstone roof and clay pavement, the strata is practically level, the cover being 25 ft. in thickness.

The mine is located 5 miles north-east of Trochu, and is entered by a drift 5 ft. high by 7 ft. wide.

The room and pillar system of working is adopted, entries being driven 7 ft. wide by 5 ft. high, the rooms are 16 ft. wide by 5 ft. high, with pillars between rooms 10 ft. wide by 60 ft. long.

The capacity of the mine is 20 tons per day, the mine cars holding 600 lbs.

Very little work has been done at this mine during the year, and it is now abandoned.

Frank Charlton. (Mine No. 631).

Mine Office: Ardley.

Overman: F. C. Goine.

Mine Surveyor: Norman Fraser.

Location of Mine: L. S. 7, Sec. 17, Tp. 38, Rge. 23, West of the 4th Mer.

Area: 30 acres. Character of coal: Lignite.

Owner of Property: Frederick C. Goine, Ardley, Alberta.

The seam being worked at this mine has a thickness of 5 ft., with soapstone roof and clay pavement, the strata lies practically level, the cover being 10 ft. in thickness.

This is a stripping proposition, and is only worked on a small scale for the supply of the settlers in the vicinity.

Theo. Kurp. (Mine No. 635).

Mine Office: Delburne, Alberta.

Overman: Theo. Kurp.

Location of Mine: L. S. 4, Sec. 7, Tp. 38, Rge. 23, West of the 4th Mer.

Area: 30 acres. Character of coal: Lignite.

Owner of Property: Theo. Kurp, Delburne, Alberta.

The seam being worked at this mine has a thickness of 5 ft., with clay roof and shale pavement, the strata is practically level, the cover being 10 ft. in thickness.

The mine is operated as a stripping pit. The output, which is 30 tons per day, is disposed of to the settlers in the vicinity.

George C. Yard. (Mine No. 661).

Mine Office: Trochu.

Mine Surveyor: Norman Fraser.

Location of Mine: S.E.¼, L. S. 4, Sec. 10, Tp. 34, Rge. 22, West of the 4th Mer.

Area: 60 acres. Character of coal: Lignite.

Owner of Property: George C Yard, Trochu, Alberta.

The seam which is being worked at this mine has a thickness of 4 ft., with sandstone roof and clay pavement, the strata is practically level, the cover being 120 ft. in thickness.

The mine is located 18 miles north of Trochu, in a coulee on the banks of the Red Deer river, and is entered by drifts 5 ft. high by 8 ft. wide.

The system of working adopted is room and pillar. Entries are driven 8 ft. wide by 5 ft. high, the rooms are 15 ft. wide by 4 ft. high, with pillars between rooms 12 ft. wide by 50 ft. long.

The capacity of the plant is 30 tons per day, the mine cars holding 1,000 lbs.

THREE HILLS DISTRICT.—DISTRICT NO. 20.

Albert Trentham. (Mine No. 113).

Mine Office: Three Hills.
Overman: Albert Trentham.
Mine Surveyor: Norman Fraser.
Location of Mine: L. S. 16, Sec. 26, Tp. 31, Rge. 24, West of the 4th Mer.
Area: 40 acres. Character of coal: Lignite.
Owner of Property: Vasco Nicholls, Three Hills, Alberta.

The seam being worked at this mine has a thickness of 5 ft., with soft shale roof and hard clay pavement, the strata lies in a horizontal position, the cover being 70 ft. in thickness.

The mine is located near Three Hills, and is entered by means of shafts 8 ft. long by 6 ft. wide by 70 ft. deep.

The mine cars, which hold 600 lbs. each, are hoisted from shaft bottom to tippie by a horse gin, the capacity of plant being 20 tons per day.

The room and pillar system of working is adopted. Entries are driven 6 ft. wide by 5 ft. high, rooms 14 ft. wide by 4 ft. 6 inches high, with pillars between rooms 12 ft. wide by 170 ft. long.

A 2½ H.P. gasoline engine has been installed for the purpose of pumping water.

George Watson. (Mine No. 303).

Mine Office: Three Hills.
Overman: George Watson.
Mine Surveyor: Norman Fraser.
Location of Mine: L. S. 11, Sec. 22, Tp. 31, Rge. 24, West of the 4th Mer.
Area: 30 acres. Character of coal: Lignite.
Owner of Property: George Watson, Box 16, Three Hills, Alberta.

The seam being worked at this mine has a thickness of 3 ft. 6 inches, with sandstone roof and hard clay pavement, the strata lies in a horizontal position, the cover being 60 ft. in thickness.

The mine is located on Knee Hill Creek, about 4 miles west of Three Hills, and is entered by a slope 10 ft. wide by 7 ft. high by 50 ft. long, on an inclination of 8 degrees, up which the coal is hauled to the tippie by a horse.

The system of working adopted is room and pillar. Entries are driven 7 ft. wide by 5 ft. high, the rooms being 14 ft. wide by 5 ft. high, with pillars between rooms 18 ft. wide by 40 ft. long.

The mine produces 10 tons per day, the mine cars holding 600 lbs.

The output is disposed of at the mines to the settlers in the vicinity.

Ellis Coal Company, Limited. (Mine No. 384).

Mine Office: Three Hills.
Authorized Capital: \$20,000.00.
President: William Ellis, Senior.
Vice-President: Norman Fraser.
Sec.-Treas.: William Ellis, Junior.
Manager: William Ellis, Senior.
Overman: Bernard Lewis.
Mine Surveyor: Norman Fraser.
Location of Mine: S.W.¼, Sec. 36, Tp. 21, Rge. 24, West of the 4th Mer.
Area: 280 acres. Character of coal: Lignite.
Owner of Property: Union Coal Co., Ltd.
Address of Owner: 510 Merchants Bank Building, Montreal, Quebec.

The seam being worked at this mine has a thickness of 5½ ft., with soft sandstone roof and hard fire-clay pavement, the strata is horizontal, the cover being 162 ft. in thickness.

The mine is located at Three Hills, and is entered by means of shafts, the hoisting shaft having two compartments, each 5½ ft. wide by 9 ft. long, and the air shaft being 6 ft. wide by 8 ft. long, equipped with stairway from the bottom to the surface.

The system of working adopted is room and pillar. Entries are driven 14 ft. wide by 6 ft. high, the rooms are 20 to 25 ft. wide by 5 ft. 6 in. high, with pillars between rooms 50 ft. square.

The plant has a capacity of 200 tons per day, the mine cars holding 2,000 lbs.

The coal is mined by a Rand-Radial coal-cutting machine, also two Ingersoll under-cutting machines of the puncher type have been in use during the year.

The mine is connected to the Edmonton-Calgary branch of the G.T.P. by a short spur.

The following additions have been made to the plant during the year: One 150 H.P. Leonard return tubular boiler, one Ingersoll-Rand air compressor, also a Sirocco fan, 15 inches by 36 inches, with a capacity of 12,000 cubic feet of air per minute.

Joseph Bramley. (Mine No. 444).

Mine Office: Twining.
Overman: Joseph Bramley.
Mine Surveyor: Norman Fraser.
Location of Mine: S.E.¼, Sec. 14, Tp. 31, Rge. 24, West of the 4th Mer.
Area: 40 acres. Character of coal: Lignite.
Owner of Property: Anthony Jackson, Twining, Alberta.

The seam being worked at this mine has a thickness of 3 ft. 2 inches, with sandstone roof and clay pavement, the strata dips 1% in a south-easterly direction, the cover being 61 ft. in thickness.

The mine is located 5 miles south of Three Hills, and is entered by drifts 4 ft. high by 7 ft. wide.

The room and pillar method of working is adopted. Entries are driven 10 ft. wide by 4 ft. high, the rooms are 18 ft. wide by 4 ft. high, with pillars between rooms 18 ft. wide by 60 ft. long.

The capacity of the plant is 30 tons per day, the mine cars holding 1,000 lbs.

Charles S. Wilson. (Mine No. 445).

Mine Office: Twining.

Overman: Frank Doughty.

Mine Surveyor: Norman Fraser.

Location of Mine: S.W.¼, Sec. 14, Tp. 31, Rge. 24, West of the 4th Mer.

Area: 20 acres. Character of coal: Lignite.

Owner of Property: Charles S. Wilson, 9811 111th St., Edmonton, Alta.

The seam being worked at this mine has a thickness of 3 ft. 2 inches, with soft sandstone roof and clay pavement, the dip of strata is 1 degree in a south-easterly direction, the cover being 56 ft. in thickness.

The mine is located in a coulee 5 miles south of Three Hills, and is entered by means of drifts 4 ft. high by 8 ft. wide.

The system of working adopted is room and pillar. Entries are driven 8 ft. wide by 4 ft. high, the rooms being 16 ft. wide by 4 ft. high, with pillars between rooms 12 ft. wide by 50 ft. long.

The capacity of plant is 12 tons per day of 8 hours, the mine cars holding 700 lbs.

The output is disposed of at the mine to settlers in the vicinity.

William T. Trentham. (Mine No. 637).

Mine Office: Three Hills.

Overman: Thomas Thompson.

Mine Surveyor: Norman Fraser.

Location of Mine: N.E.¼, Sec. 22, Tp. 31, Rge. 24, West of the 4th Mer.

Area: 40 acres. Character of coal: Lignite.

Owner of Property: William T. Trentham, Three Hills, Alberta.

The seam being worked at this mine has a thickness of 3 ft. 6 inches, with sandstone roof and hard clay pavement, the strata is level, the cover being 40 ft. in thickness.

The mine, which is located 4 miles south-west of Three Hills, was opened up during the year by means of a slope 6 ft. high by 8 ft. wide by 70 ft. long, on an inclination of 30 degrees. An air-shaft 6 ft. wide by 8 ft. long by 40 ft. deep has also been sunk for ventilation purposes.

The room and pillar method of working has been adopted. Entries are driven 8 ft. wide by 4 ft. high, the rooms being 14 ft. wide by 4 ft. high, with pillars between rooms 16 ft. wide by 50 ft. long.

The plant has a capacity of 20 tons per day, the mine cars holding 1,000 lbs.

The coal is hoisted up the slope by means of a horse gin.

CARBON DISTRICT.—DISTRICT NO. 21.

Knee Hill Coal Company, Limited. (Mine No. 53).

Mine Office: Carbon.

Head Office: Box 1504, Calgary, Alberta.

President: R. J. Christie.

Vice-President: R. J. Christie.

Directors: R. J. Christie, W. Adshead, W. Finlason.

Sec.-Treas.: W. Adshead.
General Manager: W. Adshead.
Overman: George Marrison.
Mine Surveyor: Norman Fraser.
Location of Mine: S.W.¼, Sec. 14, Tp. 29, Rge. 23, West of the 4th Mer.
Area: 320 acres. Character of coal: Lignite.
Owner of Property: Knee Hill Coal Co., Ltd., Calgary, Alberta.

The seam being worked at this mine has a thickness of 5 ft. 6 inches, with soapstone roof and clay pavement, the strata is level, the cover being 40 ft. in thickness.

The mine is entered by drifts 5 ft. 6 inches high by 7 ft. wide, and is located 2 miles east of Carbon.

The system of working adopted is room and pillar. Entries are driven 7 ft. wide by 5 ft. 6 inches high, the rooms being 15 ft. wide by 5 ft. 6 inches high, with pillars between rooms 12 ft. wide by 60 ft. long.

The capacity of the mine is 30 tons per day, the mine cars holding 1,000 lbs.

Dodds, Currie & Hoding. (Mine No. 115).

Mine Office: Carbon.
Overman: Fred Bessant.
Mine Surveyor: Norman Fraser.
Location of Mine: N.W.¼, Sec. 12, Tp. 29, Rge. 23, West of the 4th Mer.
Area: 180 acres. Character of coal: Lignite.
Owners of Property: Dodds, Currie and Hoding, Carbon, Alberta.

The seam being worked has a thickness of 4 ft., with sandstone roof and hard shale pavement, the strata is horizontal, the cover being 40 ft. in thickness.

The mine is located 3 miles east of Carbon, and is entered by a slope 6 ft. high by 12 ft. wide by 100 ft. long, on an inclination of 10 degrees, up which the mine cars are hauled by a horse.

The system of working is room and pillar. Entries are driven 8 ft. wide by 6 ft. high, the rooms being 12 ft. wide by 4 ft. high, with pillars between rooms 25 ft. square.

The output of the mine is 16 tons per day, the mine cars holding 1,000 lbs.

Wilfred Poxon. (Mine No. 187).

Mine Office: Carbon.
Overman: Wilfrid Poxon.
Mine Surveyor: Norman Fraser.
Location of Mine: S.W.¼, Sec. 15, Tp. 29, Rge. 23, West of the 4th Mer.
Area: 80 acres. Character of coal: Lignite.
Owner of Property: Wilfrid Poxon, Carbon, Alberta.

The seam being worked at this mine has a thickness of 3 ft. 6 inches, with sandstone roof and hard clay pavement, the strata is level, the cover being 80 ft. in thickness.

The mine is located half a mile west of Carbon, and is entered by means of a slope 5 ft. 6 inches high by 5 ft. wide by 115 ft. long, on an inclination of 10 degrees, driven in from the side of a hill.

The room and pillar system of working is adopted. Entries are driven 8 ft. wide by 4½ ft. high, the rooms being 16 ft. wide by 4½ ft. high, with pillars 30 to 40 ft. wide by 50 ft. long between rooms.

The coal is hoisted up the slope in mine cars by means of a steam driven hoist, the plant having a capacity of 40 tons per day, the mine cars holding 1,000 lbs.

The output is disposed of at the mine to the settlers in the vicinity.

Hedstrom Brothers. (Mine No. 189).

Mine Office: Carbon.

Overman: Charles J. Hedstrom.

Mine Surveyor: Norman Fraser.

Location of Mine: S.W.¼, Sec. 7, Tp. 29, Rge. 22, West of the 4th Mer.

Area: 40 acres. Character of coal: Lignite.

Owner of Property: Charles J. Hedstrom, Carbon, Alberta.

The seam worked at this mine has a thickness of 3 ft., with clay roof and pavement, the strata is level, the cover being 100 ft. in thickness.

The mine is located in a coulee 5 miles east of Carbon, and is entered by a drift 5 ft. high by 6 ft. wide.

The room and pillar system of working is adopted. Entries are driven 6 ft. wide by 5 ft. high, rooms 16 ft. wide by 5 ft. high, with pillars between rooms 20 ft. wide by 40 ft. long.

The mine has not been in operation during the year, and is now abandoned.

The Knee Hill Coal Company, Limited. (Mine No. 194).

Mine Office: Ghost Pine Creek.

Head Office: P. O. Box 1504, Calgary, Alberta.

President: R. J. Christie.

Vice-President: R. J. Christie.

Directors: R. J. Christie, W. Adshead, W. Finlason.

Sec.-Treas.: W. Adshead.

General Manager: W. Adshead.

Overman: Allan Campbell.

Mine Surveyor: Norman Fraser.

Location of Mine: N.E.¼, Sec. 4, Tp. 31, Rge. 22, West of the 4th Mer.

Area: 160 acres. Character of coal: Lignite.

Owner of Property: The Knee Hill Coal Co., Ltd., Box 1504 Calgary, Alberta.

The seam which is being worked at this mine has a thickness of 3 ft. 6 inches, with coal roof and hard clay pavement, the seam is level, the cover being 60 ft. in thickness.

The mine is located 18 miles north-east of Carbon, on the north bank of Three Hills creek, and is entered by means of drifts 4 ft. 6 inches high by 6 ft. wide.

The room and pillar system of working is adopted. Entries are driven 7 ft. wide by 4½ ft. high, the rooms being 12 ft. wide by 4½ ft. high, with pillars between rooms 8 ft. wide by 100 ft. long.

The output of the mine is 10 tons per day, the mine cars holding 700 lbs.

Duncan McKenzie. (Mine No. 318).

Mine Office: Carbon.

Overman: Duncan McKenzie.

Mine Surveyor: Norman Fraser.

Location of Mine: N.E. $\frac{1}{4}$, Sec. 29, Tp. 30, Rge. 22, West of the 4th Mer.

Area: 40 acres. Character of coal: Lignite.

Owner of Property: Duncan McKenzie, Carbon, Alberta.

The seam worked at this mine has a thickness of 3 ft., with sandstone roof and clay pavement, the strata is horizontal, the cover being 100 ft. in thickness.

The mine is entered by means of drifts 6 ft. high by 5 ft. wide, driven in from the side of a coulee.

The system of working adopted is room and pillar. Entries are driven 5 ft. wide by 6 ft. high, the rooms being 14 ft. wide by 3 ft. high, with pillars between rooms 8 ft. wide by 60 ft. long.

This mine has been abandoned.

Charles H. Pattison. (Mine No. 621).

Mine Office: Carbon.

Overman: Charles H. Pattison.

Location of Mine: Sec. 11, Tp. 29, Rge. 23, West of the 4th Mer.

No work has been done at this mine during the year, and it is now abandoned.

BATTLE RIVER DISTRICT.—DISTRICT No. 22.

John S. Johnson. (Mine No. 242).

Mine Office: Heatherbrae.

Overman: John S. Johnson.

Mine Surveyor: Norman Fraser.

Location of Mine: S.W. $\frac{1}{4}$, Sec. 15, Tp. 44, Rge. 19, West of the 4th Mer.

Area: 20 acres. Character of coal: Lignite.

Owner of Property: W. B. Potter, Heatherbrae, Alberta.

The seam being worked at this mine has a thickness of 3 ft., with soft clay roof and pavement, the strata is practically level, the cover being 40 ft. in thickness.

The mine is located on the north bank of the Battle river, 18 miles south of Bawlf, and is entered by drifts driven in the coal from the outcrop.

The room and pillar system of working is adopted. Entries are driven 14 ft. wide by 2 ft. 6 inches high (6 inches of coal being left up for roof support), the rooms are 16 ft. wide with pillars 14 ft. wide by 40 ft. long.

The capacity of the mine is 6 tons per day, the mine cars holding 500 lbs.

Bish Brothers & Le Gear. (Mine No. 245).

Mine Office: Hastings Coulee.

Overman: Fred Bish.

Mine Surveyor: Norman Fraser.

Location of Mine: L. S. 13 and 14, Sec. 36, Tp. 40, Rge. 16, West of the 4th Mer.

Area: 80 acres.

Character of coal: Lignite.

Owner of Property: Bish Bros. & Le Gear, Hastings Coulee, Alberta.

The seam being worked at this mine has a thickness of 7 ft. 6 inches (there are two bands of bone, each 8 inches thick, in the seam), with clay roof and sandstone pavement, the strata is practically level, the cover being 38 ft. in thickness.

The mine is located on the north bank of the Battle river, 30 miles south-east of Daysland, and is entered by drifts driven from the face of the bank. The room and pillar system of working is adopted. Entries are driven 6 ft. wide by 6 ft. 6 inches high, the rooms being 18 ft. wide by 6 ft. high, with pillars between rooms 4 ft. wide by 50 ft. long.

The rooms are driven a distance of 150 ft., then timbers are withdrawn and rooms allowed to cave. No attempt to extract the pillars is made.

The coal is undercut by compressed air machines of the Sullivan puncher type, after which it is blocked down, no powder being used.

The plant consists of a belt-driven air compressor, the power being obtained from a steam engine of the traction type.

The capacity of the mine is 50 tons per day, the mine cars holding 1,000 lbs.

The output is disposed of at the mine to the settlers in the vicinity.

J. M. Schares. (Mine No. 249).

Mine Office: Heisler.

Location of Mine: S½, L. S. 9, Sec. 16, Tp. 42, Rge. 17, West of the 4th Mer.

Area: 20 acres.

Character of coal: Lignite.

Owner of Property: John M. Schares, Heisler, Alberta.

The seam of coal worked at this mine has a thickness of 4 ft. 8 inches, with hard clay roof and clay pavement. The seam is practically level, the cover having a thickness of 50 ft.

The mine is located 20 miles south-west of Daysland, and is entered by drifts 5 ft. high by 6 ft. wide.

The room and pillar system of working is adopted, entries being driven 6 ft. wide by 5 ft. high, the rooms being 14 ft. wide by 4 ft. 8 inches high, with pillars between rooms 20 ft. wide by 75 ft. long.

Very little work has been done during the year, and the mine is now abandoned.

Julius Wilkinson. (Mine No. 251).

Mine Office: Daysland.

Overman: Julius Wilkinson.

Mine Surveyor: James Hargreaves.

Location of Mine: L. S. 16, Sec. 28, Tp. 42, Rge. 17, West of the 4th Mer.
Area: 40 acres. Character of coal: Lignite.
Owner of Property: Julius Wilkinson, Daysland, Alberta.

The seam which is being worked at this mine has a thickness of 5 ft., with clay roof and pavement, the strata is practically level, the cover having a thickness of 80 ft.

The mine is located in a coulee 18 miles south-west of Daysland, and is entered by a drift 5½ ft. high by 6 ft. wide.

The system of working adopted is room and pillar. Entries are driven 6 ft. wide by 5 ft. high, the rooms being 15 ft. wide by 5 ft. high, with pillars between rooms 20 ft. wide by 70 ft. long.

The capacity of the mine is 15 tons per day, the mine cars holding 1,000 lbs.

The output is disposed of to the settlers in the vicinity.

James R. Turney. (Mine No. 449).

Mine Office: Hastings Coulee.
Overman: James R. Turney.
Mine Surveyor: Norman Fraser.
Location of Mine: L. S. 15, Sec. 36, Tp. 40, Rge. 16, West of the 4th Mer.
Area: 40 acres. Character of coal: Lignite.
Owner of Property: James R. Turney, Hastings Coulee, Alberta.

The seam which is being worked has a thickness of 7 ft. 6 inches, with clay roof and sandstone pavement, the strata is practically level, the cover being 38 ft. in thickness.

The mine is located on the north bank of the Battle river, 30 miles south-east of Daysland, and is entered by means of a shaft 6 ft. long by 5 ft. wide by 38 ft. deep, sunk from the prairie level to the coal.

The room and pillar system of working is adopted. Entries are driven 6 ft. wide by 6 ft. 6 inches high, the rooms being 16 ft. wide.

The capacity of the mine is 25 tons per day, the mine cars holding 1,000 lbs. The output is disposed of at the mine to settlers in the vicinity.

The following improvements have been made during the year:

A hoisting shaft 5 ft. wide by 6 ft. long by 38 ft. deep has been sunk to the coal and connected to the main entry. The coal is hoisted to the tippie in a self-dumping skip by means of a horse gin. A chute has been built equipped with bar screens to give lump and nut coal. A new entry has been driven from the face of bank and located 350 ft. to the north-east of former entrance, which has been caved to cut off a fire that has been burning along the outcrop.

Evan Griffiths. (Mine No. 603).

Mine Office: Donalda.
Overman: Evan Griffiths.
Mine Surveyor: Norman Fraser.
Location of Mine: N.½, L. S. 10, Sec. 32, Tp. 41, Rge. 18, West of the 4th Mer.
Area: 20 acres. Character of coal: Lignite.
Owner of Property: Ellis Rowlands, c/o Merchants Bank, Donalda, Alta.

The seam being worked at this mine has a thickness of 42 inches, with clay shale roof and clay pavement, the strata is practically level, the cover having a thickness of from 6 to 50 ft.

The mine is located in a coulee near Donalda, and is entered by means of drifts 6 ft. wide by 42 inches high, the rooms are 12 to 14 ft. wide by 42 inches high, with pillars between rooms 6 to 8 ft. wide by 50 ft. long.

The mine produces 10 tons per day, the mine cars holding 500 lbs.

The output is disposed of in Donalda and to the settlers in the vicinity.

Adam Marzh. (Mine No. 604).

Mine Office: Donalda.

Overman: James Jackson.

Mine Surveyor: Norman Fraser.

Location of Mine: W. $\frac{1}{2}$, L. S. 15, Sec. 32, Tp. 41, Rge. 18, West of the 4th Mer.

Area: 20 acres. Character of coal: Lignite.

Owner of Property: Adam Marzh, Donalda, Alberta.

The seam which is being worked at this mine has a thickness of 42 inches, with clay shale roof and clay pavement. The strata is practically level, the cover having a thickness of 50 ft.

The mine is located in a coulee near Donalda, and is entered by means of drifts 3 ft. 6 inches high by 5 ft. 6 inches wide.

The room and pillar system of working is adopted. Entries are driven 5 ft. 6 inches wide by 3 ft. 6 inches high, the rooms being 16 ft. wide by 42 inches high, with pillars between rooms 10 ft. wide by 40 ft. long.

The output of the mine, which is 15 tons per day, is disposed of in Donalda and vicinity, the mine cars holding 500 lbs.

Pleming & Reigal. (Mine No. 607).

Mine Office: Donalda.

Overman: John Pleming.

Mine Surveyor: James Hargreaves.

Location of Mine: E. $\frac{1}{2}$, L. S. 8, Sec. 30, Tp. 41, Rge. 17, West of the 4th Mer.

Area: 20 acres. Character of coal: Lignite.

Owner of Property: Pleming & Reigal, Donalda, Alberta.

The seam worked at this mine has a thickness of 6 ft., with bone coal roof and clay sandstone pavement, the strata has a dip of 3 degrees in a south-westerly direction, the cover having a thickness of 80 ft.

The mine is located 8 miles south-east of Donalda, and is entered by means of a drift 6 $\frac{1}{2}$ ft. high by 7 ft. wide.

The system of working adopted is room and pillar. Entries are driven 7 ft. wide by 6 $\frac{1}{2}$ ft. high, the rooms being 16 ft. wide by 6 ft. high, with pillars between rooms 20 ft. wide by 60 ft. long.

Very little work has been done at the mine during the year, and it is now abandoned.

John Carlson. (Mine No. 609).

Mine Office: Donalda.
Overman: John Carlson.
Mine Surveyor: James Hargreaves.
Location of Mine: S.W. $\frac{1}{4}$, Sec. 22, Tp. 42, Rge. 17, West of the 4th Mer.
Area: 20 acres. Character of coal: Lignite.
Owner of Property: John Carlson and T. Peterson, Donalda, Alberta.

The seam of coal being worked at this mine has a thickness of 4 ft., with clay roof and pavement, the strata is practically level, the cover having a thickness of 35 ft.

The mine is located in a coulee off the banks of the Battle River, and is entered by drifts 5 ft. high by 5 ft. wide.

The room and pillar system of working is adopted. Entries are driven 5 ft. wide by 5 ft. high, the rooms being 14 ft. wide by 4 ft. high, with pillars between rooms 20 ft. wide by 75 ft. long.

The mine has a capacity of 12 tons per day, the mine cars holding 1,000 lbs.

The output is disposed of to settlers in the vicinity.

Oscar Norman. (Mine No. 613).

Mine Office: Donalda.
Overman: Oscar Norman.
Mine Surveyor: James Hargreaves.
Location of Mine: S.E. $\frac{1}{4}$, Sec. 30, Tp. 41, Rge. 17, West of the 4th Mer.
Area: 20 acres. Character of coal: Lignite.
Owner of Property: Oscar Norman, Donalda, Alberta.

The seam which is being worked at this mine has a thickness of 6 ft., with bone coal roof and sandstone pavement, the strata dips 3 degrees in a south-westerly direction, the cover being 75 ft. in thickness.

The mine is located $8\frac{1}{2}$ miles south-east of Donalda, and is entered by means of a slope 6 ft. high by 7 ft. wide by 40 ft. long, on an inclination of 18 degrees.

The room and pillar system of working is adopted. Entries are driven 7 ft. wide by 6 ft. high, the rooms 16 ft. wide by 6 ft. high, with pillars between rooms 15 ft. wide by 45 ft. long.

The haulage on the slope is done by a horse.

The capacity of the mine is 20 tons per day, the mine cars holding 1,000 lbs.

The mine works during the winter months only, the output being disposed of to the settlers in the vicinity.

Dietrich Brothers & Johnston. (Mine No. 614).

Mine Office: Heisler.
Overman: J. Harry Dietrich.
Mine Surveyor: James Hargreaves.
Location of Mine: L. S. 4, Sec. 14, Tp. 42, Rge. 17, West of the 4th Mer.
Area: 40 acres. Character of coal: Lignite.
Owners of Property: Dietrich Bros. & Johnston, Heisler, Alberta.

The seam being worked at this mine has a thickness of 4 ft., with clay roof and pavement, the strata is practically level, the cover having a thickness of 60 ft.

The mine is located in a coulee on the banks of the Battle river, and is entered by drifts.

The room and pillar system of working is adopted. Entries are driven 6 ft. wide by 5 ft. high, the rooms being 14 ft. wide by 4 ft. high, with pillars between rooms 12 ft. wide by 60 ft. long.

The mine has a capacity of 15 tons per day, the mine cars holding 700 lbs. Very little work has been done during the year.

Charles F. Martin. (Mine No. 615).

Mine Office: Heisler.

Overman: Frank Allen.

Mine Surveyor: James Hargreaves.

Location of Mine: S. $\frac{1}{2}$, L. S. 1, Sec. 28, Tp. 42, Rge. 17, West of the 4th Mer.

Area: 20 acres.

Character of coal: Lignite.

Owner of Property: Charles F. Martin, Heisler, Alberta.

The seam which is being worked at this mine has a thickness of 12 ft., with clay roof and pavement, the strata is practically level, the cover having a thickness of 50 ft.

The mine is located 21 miles south-west of Daysland, and is entered by drifts 12 ft. high by 6 ft. wide.

The room and pillar system of working is adopted. Entries are driven 6 ft. wide by 5 ft. high, rooms 14 ft. wide by 4½ ft. high, with pillars between rooms 16 ft. wide by 50 ft. long.

The mine has a capacity of 20 tons per day, the mine cars holding 800 lbs. The output is disposed of to the settlers in the vicinity.

John F. Tate. (Mine No. 616).

Mine Office: Ferry Point.

Overman: Zeus Peter Winters.

Location of Mine: S.E. $\frac{1}{4}$, Sec. 18, Tp. 43, Rge. 17, West of the 4th Mer.

Area: 30 acres.

Character of coal: Lignite.

Owner of Property: John F. Tate, Ferry Point, Alberta.

The seam being worked at this mine has a thickness of 3 ft., with clay roof and pavement, the strata is practically level, the cover being 15 ft. in thickness.

The mine is located on the banks of the Battle river, 14 miles south of Bawlf, and is entered by drifts.

Very little work has been done during the year.

Lux & Harrison. (Mine No. 618).

Mine Office: Foreman.

Overman: George L. Lux.

Location of Mine: N.E.¼, L. S. 9, Sec. 26, Tp. 40, Rge. 16, West of the 4th Mer.

Area: 20 acres. Character of coal: Lignite.

Owner of Property: William Penticost, Foreman, Alberta.

The seam being worked at this mine has a thickness of 7 ft., with shale roof and clay pavement, the strata is practically level, the cover being 40 ft. in thickness.

The mine is located on the south bank of the Battle river, 13½ miles north of Halkirk, and is entered by drifts 6 ft. high by 6 ft. wide driven in the coal from the side of a coulee.

The room and pillar system of working is adopted. Entries are driven 6 ft. wide by 6 ft. high, the rooms are 16 ft. wide by 6 ft. high, with pillars between rooms 15 ft. wide by 60 ft. long.

The output of the mine is 10 tons per day, and is disposed of to the settlers in the vicinity.

Albert T. Miner. (Mine No. 622).

Mine Office: Ferry Point.

Overman: Albert T. Miner.

Mine Surveyor: James Hargreaves.

Location of Mine: S.W.¼, Sec. 8, Tp. 43, Rge. 17, West of the 4th Mer.

Area: 20 acres. Character of coal: Lignite.

Owner of Property: Albert T. Miner, Ferry Point, Alberta.

The seam which is being worked at this mine has a thickness of 4 ft. 6 inches, with clay roof and pavement, the strata is practically level, the cover being 35 ft. in thickness.

The mine is located on the south bank of the Battle river, 16 miles south-west of Bawlf, and is entered by a drift 5 ft. high by 8 ft. wide.

The system of working adopted is room and pillar. Entries are driven 8 ft. wide by 5 ft. high, the rooms being 14 ft. wide by 4 ft. 6 inches high, with pillars between rooms 20 ft. wide by 100 ft. long.

The capacity of the mine is 15 tons per day, and is disposed of to the settlers in the district.

O. R. Sickstrum. (Mine No. 625).

Mine Office: Meeting Creek.

Mine Surveyor: James Hargreaves.

Location of Mine: L. S. 14, Sec. 14, Tp. 43, Rge. 20, West of the 4th Mer.

Area: 20 acres. Character of coal: Lignite.

Owner of Property: O. R. Sickstrum, Meeting Creek, Alberta.

The seam which is being operated at this mine has a thickness of 3 ft., with clay roof and pavement, the strata is practically level, the cover being 8 ft. in thickness.

The mine is located near Meeting Creek, and is worked as a strip-ping proposition.

Walter Jackson. (Mine No. 627).

Mine Office: Donalda.

Overman: James Jackson.

Location of Mine: N.W. $\frac{1}{4}$, Sec. 32, Tp. 41, Rge. 18, West of the 4th Mer.

Area: 20 acres. Character of coal: Lignite.

Owner of Property: Walter Jackson, Donalda, Alberta.

Only prospecting work has been done, the coal seam having proved dirty the mine has been abandoned.

William Henry Pickering. (Mine No. 662).

Mine Office: Donalda.

Overman: Clifford Warmouth.

Mine Surveyor: Norman Fraser.

Location of Mine: N. $\frac{1}{2}$, L. S. 5, Sec. 29, Tp. 41, Rge. 17, West of the 4th Mer.

Area: 20 acres. Character of coal: Lignite.

Owner of Property: William Henry Pickering, Donalda, Alberta.

The seam which is being worked at this mine has a thickness of 6 ft., with bands of bone near the top of seam, the roof is bone coal, the pavement being clay sandstone, the strata is practically level, the cover being 75 ft. in thickness.

The mine is located 8 miles south-east of Donalda, and is entered by an open-cut drift.

The room and pillar system of working is adopted. Entries are driven 7 ft. wide by 6 ft. high, the rooms being 16 ft. wide by 6 ft. high, with pillars between rooms 14 ft. wide by 75 ft. long.

The bunkers for storing coal are built on the south side of the stream, across which a small bridge has been built for the mine cars to pass over.

The capacity of the mine is 15 tons per day, and is disposed of at the mine to the settlers in the vicinity, the mine cars holding 850 lbs.

Efner W. Simmons. (Mine No. 666).

Mine Office: Hastings Coulee.

Overman: John Jones.

Location of Mine: N.E. $\frac{1}{4}$, Sec. 2, Tp. 41, Rge. 16, West of the 4th Mer.

Area: 10 acres. Character of coal: Lignite.

Owner of Property: Efner W. Simmons, Hastings Coulee, Alberta.

The seam being worked at this mine has a thickness of 6 ft., with clay roof and pavement, the strata is practically level, the cover being 30 ft. in thickness.

The mine is located in a coulee on the north bank of the Battle river, 29 miles south-east of Daysland.

The work done consists of driving entries from the bank of the coulee.

CAMROSE DISTRICT.—DISTRICT No. 23.

Marcus L. Hyde, Ltd. (Mine No. 215).

Mine Office: Dodds.
Authorized Capital: \$10,000.00.
President: M. L. Hyde.
Directors: Mrs. M. L. Hyde, G. H. A. Hunt, M. L. Hyde.
Sec.-Treas.: G. H. A. Hunt.
Managing Director: M. L. Hyde.
Superintendent: Arthur Dickenson.
Mine Surveyor: M. L. Hyde.
Location of Mine: S. $\frac{1}{4}$, L. S. 11, Sec. 14, Tp. 49, Rge. 18, West of the 4th Mer.
Area: 200 acres. Character of Coal: Lignite.
Owner of Property: Marcus L. Hyde, Ltd., Dodds, Alberta.

The seam which is being worked has a thickness of 6 ft., with clay roof and pavement, the strata has a dip of 1 degree in a north-westerly direction, the cover having an average thickness of 12 ft.

The capacity of the plant is 200 tons per day.

This pit is located on the Canadian Northern Railway, Vegreville to Camrose branch, a spur of 2,600 ft. having been built to the property. The surface is stripped by an elevator scraper operated by 16 mules. The coal is blocked down and loaded into cars of one ton capacity, which are hauled up a 3% incline 300 ft. long, by a gasoline locomotive.

The following improvements have been made during the year:

Chutes have been built for loading into railway cars and farmers' wagons. A weighing and supply house 16 ft. by 20 ft., locomotive shed and shop 16 ft. by 20 ft., and office building 25 ft. by 38 ft., have been erected.

Spicer Coal Co., Ltd. (Mine No. 241).

Mine Office: Dinant.
Head Office: Saskatoon, Saskatchewan.
President: T. K. McCallum.
Directors: T. K. McCallum, G. H. Clare, J. C. Bell, J. D. McDonald, James R. Wilson, A. McDonald.
Sec.-Treas.: R. T. Chown.
General Manager: William Walter.
Manager: John A. McLenhan.
Overman: John A. McLenhan.
Mine Surveyor: John A. McLenhan.
Location of Mine: S.W. $\frac{1}{4}$, Sec. 18, Tp. 48, Rge. 19, West of the 4th Mer.
Area: 160 acres. Character of coal: Lignite.
Owner of Property: Spicer Coal Co., Ltd., Saskatoon, Saskatchewan.

The seam which is being worked at this mine has a thickness of 6 ft. 3 inches, with clay roof and pavement, the strata dips 1 degree in a south-westerly direction, the cover being 30 ft. in thickness.

The mine is located 2 miles east of Dinant, a station on the Edmonton-Calgary branch of the G.T.P., and is entered by means of a slope 7 ft. high by 5 ft. wide by 70 ft. long, on an inclination of 22½ degrees.

The coal is hoisted up the slope in mine cars and dumped over a bar screen into a bunker, from which it is loaded into wagons and hauled by teams to the railroad. The plant consists of a 50 H.P.

boiler of the locomotive type, one steam hoist and steam pumps below ground, and has a capacity of 120 tons per day of mine run coal, the mine cars holding 1,200 lbs.

Stony Creek Collieries, Ltd. (Mine No. 244).

Mine Office: Camrose.
President: Dennis Twomey.
General Manager: Dennis Twomey.
Overman: James Mathewson.
Mine Surveyor: Norman Fraser.
Location of Mine: S.E.¼, Sec. 33, Tp. 46, Rge. 20, West of the 4th Mer.
Area: 100 acres. Character of coal: Lignite.
Owner of Property: Stony Creek Collieries, Ltd., Camrose.

The seam which is being worked has a thickness of 4 ft. 6 inches, with soft clay roof and pavement, the strata is rolling, the cover being 82 ft. in thickness.

The mine is located half a mile south of the city of Camrose, and is entered by drifts 6 ft. high by 6 ft. wide.

The room and pillar system of working is adopted. Main entries are driven 6 ft. high by 6 ft. wide, side entries 5 ft. high by 5 ft. wide, the rooms being 7 ft. wide by 4½ ft. high, with pillars between rooms 23 ft. wide by 150 ft. long.

The capacity of the plant is 40 tons per day, the mine cars holding 800 lbs.

The following improvements and additions have been made to the plant during the year:

A shaker screen 24 ft. long by 3 ft. wide, operated by an 8 H.P. gasoline engine, and a 6 H.P. gasoline engine to operate a duplex pump.

Round Hill Collieries, Ltd. (Mine No. 250).

Mine Office: Round Hill.
President: Dennis Twomey.
Directors: George P. Smith, M.P.P., Doctor G. G. Stewart, J. K. Burgess, LL.B., J. R. N. Cooks, Dennis Twomey.
Sec.-Treas.: J. Twomey.
General Manager: George P. Smith, M.P.P.
Overman: David Williamson.
Mine Surveyor: Norman Fraser.
Location of Mine: S.E.¼, Sec. 30, Tp. 48, Rge. 18, West of the 4th Mer.
Area: 80 acres. Character of coal: Lignite.
Owner of Property: Round Hill Collieries, Ltd., Round Hill.

The seam which is being worked has a thickness of 7 ft., with clay roof and soft sandstone pavement, the strata lies practically level, the cover being 18 ft. in thickness.

The mine is located near Round Hill, a station on the Vegreville branch of the C.N.R., to which it is connected by a spur track, and is entered by means of a slope 8 ft. high by 10 ft. wide by 90 ft. long, on an inclination of 20%.

The room and pillar system of working is adopted. Entries are driven 7 ft. wide by 5½ ft. high, the rooms being 11 ft. wide by 5½ ft. high, with pillars between rooms 11 ft. wide by 150 ft. long.

The plant has a capacity of 250 tons per day, the mine cars holding 1,450 lbs.

The coal is dumped from the mine cars into a self-dumping skip at the bottom of the slope and hoisted to the tippie by a steam-driven hoist, after which it passes over screens and is loaded into railway cars.

Battle River Collieries, Ltd. (Mine No. 302).

Mine Office: Rosenroll.

Location of Mine: S.E.¼. Sec. 7, Tp. 46, Rge. 18, West of the 4th Mer.

Area: 1,300 acres. Character of coal: Lignite.

The seam which is worked at this mine has a thickness of 7 ft. 6 inches, with clay roof and clay pavement, the strata is practically level, the cover being 167 feet in thickness.

The mine is located at Rosenroll on the Wetaskiwin branch of the C.P.R., and is entered by means of shafts 12 ft. long by 7 ft. wide by 167 ft. deep.

The room and pillar system of working is adopted.

Entries are driven 7 ft. wide by 7 ft. high, and rooms 12 ft. wide by 7 ft. high, with pillars 18 ft. wide by 120 ft. long.

George Law. (Mine No. 601).

Mine Office: Round Hill.

Overman: George Law.

Mine Surveyor: Norman Fraser.

Location of Mine: S.½, L. S. 9, Sec. 10, Tp. 48, Rge. 18, West of the 4th Mer.

Area: 20 acres.

Character of coal: Lignite.

Owner of Property: George Law, Round Hill, Alberta.

The seam of coal which is being worked at this mine has a thickness of 4 ft. 9 inches, with clay roof and pavement, the strata is practically level, the cover being 16 ft. in thickness.

The mine is located 6 miles south-east of Round Hill, and is entered by an opencut driven on an inclination of 25%.

The room and pillar system of working is adopted. Entries are driven 8 ft. wide by 4 ft. 4 inches high, 5 inches of the coal being left for roof support, the rooms are driven 11 ft. wide by 4 ft. high, with pillars between rooms 18 ft. wide by 50 ft. long.

The coal is hoisted up the slope by means of a horse. The capacity of the mine is 15 tons per day, the mine cars holding 1,000 lbs.

The output is disposed of to the settlers in the vicinity.

L. Strilczyk. (Mine No. 610).

Mine Office: Round Hill.

Overman: Joseph Zykabar.

Mine Surveyor: Norman Fraser.

Location of Mine: N. $\frac{1}{2}$, L. S. 8, Sec. 10, Tp. 48, Rge. 18, West of the 4th Mer.

Area: 20 acres. Character of coal: Lignite.

Owner of Property: L. Strilczyk, Round Hill, Alberta.

The seam being worked at this mine has a thickness of 4 ft. 10 inches, with clay roof and pavement, the strata is practically level, the cover being 15 ft. in thickness.

The mine is located $6\frac{1}{2}$ miles south-east of Round Hill, and is entered by an open-cut to the coal driven on an inclination of 30%.

The room and pillar system of working is adopted. Entries are driven 8 ft. wide by 4 ft. 7 inches high, the rooms being 10 ft. wide by 4 ft. 6 inches high, with pillars between rooms 18 ft. wide by 50 ft. long.

The haulage on the slope is done by a horse, the output of the mine being 15 tons per day, the mine cars holding 500 lbs.

TOFIELD DISTRICT.—DISTRICT No. 24.

J. J. McDevitt. (Mine No. 149).

Mine Office: Tofield.

Overman: J. J. McDevitt.

Mine Surveyor: C. C. Sutherland.

Location of Mine: S.W. $\frac{1}{4}$, Sec. 24, Tp. 50, Rge. 19, West of the 4th Mer.

Area: 40 acres. Character of coal: Lignite.

Owner of Property: P. F. Ingram, Tofield, Alberta.

The seam which is being worked at this mine has a thickness of 8 ft., with clay roof and pavement, the strata is practically level, the cover averaging 14 ft. in thickness.

The mine is located $3\frac{1}{2}$ miles south of Tofield, and is entered by a shaft 9 ft. long by 6 ft. 6 inches wide by 22 ft. deep, the coal being hoisted to the tippie by means of a steam-driven hoist.

The capacity of the plant is 25 tons per day, the mine cars holding 1,000 lbs.

A stripping pit is also operated at this mine during the winter months, the surface being stripped off the coal during the summer by teams with scrapers.

Tofield Coal Co., Ltd. (Mine No. 252).

Mine Office: Tofield.

Head Office: Benson Block, Edmonton, Alberta.

Authorized Capital: \$250,000.00.

President: Robert Lee.

Vice-President: W. I. Crafts.

Directors: Robert Lee, W. I. Crafts, C. Gallinger.

Sec.-Treas.: C. Gallinger.

General Manager: C. Gallinger.

Superintendent: William J. Morton.

Location of Mine: N. $\frac{1}{2}$, Sec. 26, Tp. 50, Rge. 19, West of the 4th Mer.

Area: 640 acres. Character of coal: Lignite.

Owner of Property: Tofield Coal Co., Ltd., Benson Block, Edmonton.

The seam being worked at this mine has a thickness of $7\frac{1}{2}$ ft., with clay shale roof and clay pavement, the strata is practically level, the cover being 16 ft. in thickness.

The mine is located at Tofield and is worked as a stripping pit. The surface clay and shale is removed by means of a Marion steam shovel, and is loaded by this shovel into small side dump cars and hauled along to end of pit. A main and tail rope hoist is used to haul from the pit, and another hoist placed on top of the dump hauls the cars up onto the dump.

A spur track connects the pit with the main line of the G.T.P. Railroad cars are taken into the pit, the coal being loaded into same by wheelbarrows.

The capacity of the plant is 450 tons per day.

The Dobell Coal Co. of Tofield, Ltd. (Mine No. 340).

Mine Office: Tofield.
 Head Office: 138 St. Peter's Street, Quebec.
 Authorized Capital: \$50,000.00.
 President: W. M. Dobell.
 Vice-President: A. E. Doucet.
 Directors: W. M. McPherson, Lorenzo Evans, R. Reid Dobell, T. R. Henderson.
 Sec.-Treas.: F. O. Judge.
 Managing Director: T. R. Henderson.
 Mine Surveyor: T. R. Henderson.
 Location of Mine: S.E.¼, Sec. 35, Tp. 50, Rge. 19, West of the 4th Mer.
 Area: 160 acres. Character of coal: Lignite.
 Owner of Property: Dobell Coal Co., of Tofield.
 Address of Owner: 138 St. Peter's St., Quebec.

The seam being worked at this mine has a thickness of 8 ft., with clay roof and pavement, the strata is practically level, the cover being 14 ft. in thickness.

The mine is located near Tofield on the main line of the G.T.P.

The method of operation is to strip the surface soil and clay by means of a steam shovel, after which the coal is loaded into the railway cars with wheelbarrows. A spur track connects the pit with the main line.

The capacity of the plant is 450 tons per day.

CLOVER BAR DISTRICT.—DISTRICT NO. 25.

William Daly. (Mine No. 8).

Mine Office: Clover Bar.
 Overman: James Hetherington.
 Mine Surveyor: Norman Fraser.
 Location of Mine: W.½, L. S. 9, Sec. 7, Tp. 53, Rge. 23, West of the 4th Mer.
 Area: 15 acres. Character of coal: Lignite.
 Owner of Property: William Daly, Clover Bar, Alberta.

The seam which is being worked at this mine has a thickness of 7 ft., with clay roof and pavement, and dips 2 degrees in a south-westerly direction, the cover varying from 10 to 70 ft. in thickness.

The mine is located on the south side of the North Saskatchewan river near Clover Bar, and is entered by drifts 6 ft. high by 6 ft. wide.

The room and pillar system of working is adopted. Entries are driven 5½ ft. wide by 6 ft. high, the rooms being 16 ft. wide by 6 ft. high, with pillars between rooms 16 ft. wide by 50 ft. long.

This mine is operated during the winter months, and has a capacity of 50 tons per day, the mine cars holding 1,000 lbs.

Clover Bar Coal Co., Ltd. (Mine No. 9).

Mine Office: Beverly.
Head Office: 2 Mortlake Block, Edmonton, Alberta.
Authorized Capital: \$500,000.00.
President: H. E. R. Rogers.
Vice-President: J. J. Millidge.
Directors: H. E. R. Rogers, J. J. Millidge, H. H. Robertson, A. C. Dunn.
Sec.-Treas.: J. F. Hunter.
General Manager: J. F. Hunter.
Overman: George Bilson.
Mine Surveyor: David Jones.
Location of Mine: N.E. ¼, L. S. 3, Sec. 18, Tp. 53, Rge. 23, West of the 4th Mer.
Area: 815 acres. Character of Coal: Lignite.
Owner of Property: Clover Bar Coal Co., Ltd., Mortlake Block, Edmonton.

The seam being worked at this mine has a thickness of 7 ft., with clay shale roof and pavement, the strata dips 1½ degrees in a south-easterly direction, the cover having a thickness of 85 ft.

The mine is located at Clover Bar, 6 miles east of Edmonton, and is entered by means of shafts and a drift driven in from the north bank of the river, the hoisting shaft is 12 ft. long by 6 ft. wide by 85 ft. deep.

The room and pillar system of working is adopted. Entries are driven 6 ft. wide by 6 ft. high, the rooms being 10 ft. wide by 6 ft. high, with pillars between rooms 50 ft. square.

The hoisting shaft is divided into two compartments and is equipped with self-dumping cages.

The plant has a capacity of 250 tons per day, the mine cars holding 1,000 lbs.

Connection is made with the Grand Trunk Pacific Railway by means of a short spur.

Humberstone Coal Company. (Mine No. 43).

Mine Office: Beverly.
Head Office: Edmonton, Alberta.
Authorized Capital: Private Company.
President: Mrs. B. J. R. Humberstone.
Secretary: Mrs. B. J. R. Humberstone.
General Manager: B. J. R. Humberstone.
Manager: William H. Duggan.
Overman: William G. Heeley.
Examiners: Albert Williams, David Morris.
Mine Surveyor: William H. Duggan.
Location of Mine: L. S. 15, Sec. 7, Tp. 53, Rge. 23, West of the 4th Mer.
Area: 200 acres. Character of coal: Lignite.
Owner of Property: William Humberstone, Dr. 506, Beverly, Alberta.

The seam being worked at this mine has a thickness of 7 ft., with clay roof and pavement, the strata has a dip of $1\frac{1}{2}$ degrees in a south-westerly direction, the cover having a thickness of from 50 to 125 ft.

The mine is located east of Edmonton, near Beverly, and is entered by means of a shaft 11 ft. long by 6 ft. wide by 125 ft. deep; also a drift driven in from the river bank 7 ft. high by 9 ft. wide. Railway connection is made to the mine by a short spur from the G. T. P. Railway.

The room and pillar system of working is adopted, entries being driven 9 ft. wide by 7 ft. high, the rooms being 15 ft. wide by 7 ft. high, with pillars between rooms 15 ft. wide by 100 ft. long.

The coal is hoisted up No. 1 shaft in self-dumping skips, and is dumped over a shaking screen. The coal from No. 2 opening, which is located on the bank of the Saskatchewan river, 2,200 ft. from No. 1 shaft, is hauled across the surface by a main and tail rope haulage system in trips of 12 cars, the cars being dumped into a skip car which is hoisted up an incline to the tipple level. This skip is self-dumping, the coal going down the chute to the shaking screen.

Open lights of the carbide type are used throughout the mine, and electric lights are used on the tipple and at the shaft bottom.

The plant has a capacity of 600 tons per day, the mine cars holding 1,000 lbs.

During the month of March, 1915, water broke into the shaft mine operated by this company, flooding the workings and causing a number of caves.

The main east entry was completely blocked, but has been cleaned up and re-timbered for about 400 ft., and connection has been made with the workings in No. 2 mine.

The following improvements have been made during the year: A $7\frac{1}{2}$ K.W. electric generator has been installed for lighting purposes; a new haulage engine has been installed near the foot of No. 1 shaft for the purpose of operating a main and tail rope haulage on the main entry; this hoist is equipped with double tandem drums. The boarding-house has been repaired and two rooms fitted up as a wash-house, equipped with shower baths having hot and cold water connections. A new Ventura fan has been installed for ventilation purposes.

Bush Mine Coal Co. (Mine No. 46).

Mine Office: Beverly.
Authorized Capital: \$10,000.00. (Not incorporated).
General Manager: H. S. Southgate.
Manager: Norman Fraser.
Overman: K. S. Campbell.
Mine Surveyor: Norman Fraser.
Location of Mine: River Lot 42, Edmonton.
Area: 210 acres. Character of coal: Lignite.
Owner of Property: Magrath & Holgate, Edmonton.

The seam which is being worked has a thickness of 6 ft., with bone roof and clay pavement, the strata has an average dip of 2 de-

grees in a south-westerly direction, the cover being from 45 to 112 ft. in thickness.

The mine is located near Beverly, and is entered by means of a hoisting slope 6 ft. high by 8 ft. wide by 350 ft. long, on an inclination of 12 degrees, the air shaft being 8 ft. square by 45 ft. deep.

The room and pillar system of working is adopted. Entries are driven 7 ft. wide by 6 ft. high, the rooms being 16 ft. wide by 6 ft. high, with pillars between rooms 16 ft. wide by 60 ft. long.

The coal is hauled up the slope to the tippie by a steam-driven haulage engine and dumped into bunkers. The plant has a capacity of 300 tons per day, the mine cars holding 1,200 lbs.

The following improvements have been made during the year: A frame building 12 ft. by 12 ft. for office; frame building 12 ft. by 24 ft. for wash-house, with tank for heating water; also steam pipes for heating. Track on slope re-laid to face of main entry with 20 lb. steel; new stable 14 ft. by 16 ft. A No. 10 Sirocco fan has been installed direct connected to a single engine.

The mine has no railway connection, all coal being hauled away by teams.

Open lights of the carbide type are used throughout the mine.

Keith & Fulton. (Mine No. 69).

Mine Office: Clover Bar.

Overman: Samuel Finlay.

Mine Surveyor: Norman Fraser.

Location of Mine: E. $\frac{1}{2}$, L. S. 16, Sec. 7, Tp. 53, Rge. 23, West of the 4th Mer.

Area: 40 acres. Character of coal: Lignite.

Owner of Property: Presbyterian Church, Edmonton, Alberta.

The seam which is being worked at this mine has a thickness of 7 ft., with clay roof and pavement, the strata dips 2 degrees in a south-westerly direction, the cover varying from 15 to 9 ft. in thickness.

The mine is located near Clover Bar on the south side of the North Saskatchewan river, and is entered by drifts 6 ft. high by 6 ft. wide, driven through clay and gravel for 75 ft.

The system of working adopted is the room and pillar. Entries are driven 7 ft. wide by 6 ft. high, the rooms being 15 ft. wide by 6 ft. high, with pillars between rooms 15 ft. wide by 60 ft. long.

The capacity of the mine is 100 tons per day, the mine cars holding 1,000 lbs. Horse haulage is used from the working places to the tippie.

Byers Brothers. (Mine No. 90).

Mine Office: Clover Bar.

Overman: William Dalziel.

Mine Surveyor: Norman Fraser.

Location of Mine: N.W. $\frac{1}{4}$, L. S. 13, Sec. 8, Tp. 8, Rge. 23, West of the 4th Mer.

Area: 160 acres. Character of coal: Lignite.

Owner of Property: Byers Brothers, Clover Bar, Alberta.

The seam which is being worked at this mine has a thickness of 7 ft., with clay roof and pavement, from 12 to 14 inches of coal being left up as roof support, the seam has a dip of 2 degrees in a south-westerly direction, the cover varying from 10 to 95 ft. in thickness.

This mine is located near Clover Bar, of the south side of the North Saskatchewan river, and is entered by drifts 6 ft. high by 7 ft. wide, driven through clay and gravel for 100 ft.

The room and pillar system of working is adopted. Entries are driven 7 ft. wide by 6 ft. high, the rooms being 14 ft. wide by 6 ft. high, with pillars between rooms 16 ft. wide by 50 ft. long.

Horses are used to haul mine cars from the working places to the tippie, the plant having a capacity of 150 tons per day, the mine cars holding 800 lbs.

R. P. Ottewell. (Mine No. 91).

Mine Office: Clover Bar.

Overman: W. J. Ottewell.

Mine Surveyor: A. Driscoll.

Location of Mine: S.W. $\frac{1}{4}$, Sec. 17, Tp. 53, Rge. 23, West of the 4th Mer.

Area: 140 acres. Character of coal: Lignite.

Owner of Property: R. P. Ottewell, Clover Bar, Alberta.

The seam being worked at this mine has a thickness of 6 ft., with clay roof and pavement, the strata dips 2 degrees in a south-westerly direction, the cover having a thickness of 80 ft.

The mine is located at Clover Bar, near the Grand Trunk Pacific Railway bridge across the North Saskatchewan river, and is entered by two drifts from the river bank, also an airshaft 5 ft. wide by 6 ft. long by 80 ft. deep is sunk from the prairie.

The coal is hauled to the outside by horses, dumped over bar and wire mesh screen into bunkers, after which it is loaded into small cars and hauled up the incline by horses to the prairie level, then to a spur from the Grand Trunk Railway.

Open lights of the carbide type are used throughout the mine.

The following improvements have been made during the year: A tippie 60 ft. long by 25 ft. high; a bunker with 100 tons capacity; laid 3,000 ft. of track with 20 lb. rails on surface from bunker to loading platform at railway; 600 ft. of 3-rail incline with passing track half-way; bar screen, 2 inch space with $\frac{3}{4}$ inch mesh screen for slack; a fan 5 ft. 6 inches by 2 ft. wide, belt driven by 5 H.P. gasoline engine.

Great West Coal Company, Limited. (Mine No. 99).

Mine Office: Box 1866, Edmonton.

Head Office: Edmonton.

Authorized Capital: \$150,000.00.

President: James C. Dunn.

Directors: J. C. Dunn, W. S. Cupples, A. C. Dunn.

Sec.-Treas.: W. S. Cupples.

General Manager: J. C. Dunn.

Manager: Alex. C. Dunn.

Overmen: John Russell, Thomas Strickland.

Mine Surveyor: A. C. Dunn.

Location of Mine: S.E. $\frac{1}{4}$, Sec. 7, Tp. 53, Rge. 23, West of the 4th Mer.
Area: 118 acres. Character of coal: Lignite.
Owner of Property: Great West Land Company, Edmonton.

The seam which is being worked has a thickness of 6 ft. 3 inches, with coal roof 12 inches thick and clay pavement, the strata is undulating with slight dip in a south-westerly direction, the cover being 160 ft. in thickness.

The mine is entered by means of drifts 6 ft. high by 8 ft. wide, driven from the banks of the river, and is located near Clover Bar, on the south side of the North Saskatchewan river.

The coal is hoisted from drifts to tippie level over a double track surface slope by means of a first motion hoisting engine.

The system of working adopted is room and pillar. Entries are driven 6 ft. wide by 6 ft. 3 inches high, the rooms being 14 ft. wide by 6 ft. 3 inches high, with pillars between rooms 25 ft. wide by 60 ft. long.

The tippie is equipped with screens for making 3 sizes of coal.

The power plant consists of two horizontal return tubular boilers of 110 H.P. each, one 16 H.P. steam engine belt connected to a 25 K.W.D.C. generator for operating the fan and lighting the plant. The fan is of the Ventura type, operating exhausting and capable of producing 50,000 cubic feet of air per minute. Open lights of the carbide type are used throughout the mine.

A shaking screen which has been installed and put in operation is belt connected to an electric motor. A single engine 15 inch by 30 inch, with fly wheel 10 ft. dia. used as a driving pulley, belt connected to an electric generator, producing power for lighting and operating fan and tippie machinery has also been installed.

EDMONTON DISTRICT.—DISTRICT No. 26.

Molley & Carterra. (Mine No. 24).

Mine Office: 10502 98th Street, Edmonton.
Overman: John Molley.
Mine Surveyor: Norman Fraser.
Location of Mine: E. $\frac{1}{2}$ of N. W. $\frac{1}{4}$, Sec. 20, Tp. 51, Rge. 25, West of the 4th Mer.
Area: 52 acres. Character of coal: Lignite.
Owner of Property: Wetaskiwin Coal Co., Wetaskiwin, Alberta.

The seam being worked at this mine is 5 ft. in thickness, with clay roof and pavement, the strata is practically level, the cover being 100 ft. in thickness.

The mine is located on the south side of the North Saskatchewan river, 14 miles south-west of Edmonton, and is entered by means of drifts 5 ft. high by 6 ft. wide.

The room and pillar system of working is adopted. Entries are driven 6 ft. wide by 5 ft. high, the rooms being 10 ft. wide by 5 ft. high, with pillars between rooms 20 ft. wide by 50 ft. long.

The mine produces 10 tons per day, which is disposed of to the settlers in the vicinity.

J. T. Radford. (Mine No. 29).

Mine Office: Ellerslie.
Head Office: Edmonton South, Alberta.
Overman: Joseph Walsh.
Mine Surveyor: F. B. Smith.
Location of Mine: L. S. 11, Sec. 25, Tp. 51, Rge. 25, West of the 4th Mer.
Area: 640 acres. Character of coal: Lignite.
Owner of Property: White Star Coal Co., Ltd., Edmonton South, Alta.

The seam being worked at this mine has a thickness of 5 ft., with clay roof and pavement, the strata is undulating, the cover being from 30 ft. to 115 ft. in thickness.

The mine is located 10 miles south-west of Edmonton, on White Mud Creek, and is entered by slopes 5 ft. high by 11 ft. wide by 36 ft. long, on an inclination of 25 degrees.

The system of working adopted is room and pillar. Entries are driven 8 ft. wide by 5 ft. high, the rooms being 8 ft. wide by 5 ft. high, with pillars 20 and 25 ft. wide by 60 ft. long.

The coal is hoisted up the slope to tippie level by means of a steam-driven hoist.

The plant has a capacity of 100 tons per day, the mine cars holding 1,000 lbs.

The output is disposed of to the settlers in the vicinity.

McPeak Coal Co. (Mine No. 49).

Mine Office: Cor. 112th Ave., and 76th St., Edmonton.
General Manager: P. J. McPeak.
Overman: H. Hunter.
Mine Surveyor: David Jones.
Location of Mine: River Lot 26.
Area: 35 acres. Character of coal: Lignite.
Owner of Property: Kirkness Estate, Edmonton, Alberta.

The seam being worked at this mine has a thickness of 5 ft., with clay roof and pavement, the strata is practically level, the cover varying from 110 to 200 ft. in thickness.

The mine is located at corner of 112th Ave. and 76th St., Edmonton, and was formerly operated by The Standard Coal Co., Ltd. It is entered by means of a slope 6 ft. high by 8 ft. wide by 208 ft. long, on an inclination of 29 degrees sunk from the bottom of Rat Creek coulee, also an airshaft 6 ft. long by 5 ft. wide by 120 ft. deep.

The room and pillar system of working is adopted. Entries are driven 8 ft. wide by 5 ft. high, the rooms being 14 ft. wide by 5 ft. high, with pillars between rooms 16 ft. wide by 60 ft. long.

From the entrance to the slope a trestle is continued up the face of bank to the tippie on an inclination of 29 degrees, the mine cars being hauled up the slope to tippie by a steam-driven hoist.

The plant consists of 2 locomotive type boilers and one vertical boiler, also steam hoists.

The capacity of the plant is 200 tons per day, the mine cars holding 1,200 lbs.

An airshaft 5 ft. wide by 6 ft. long by 120 ft. deep has been sunk. A small blower fan is used for ventilation purposes. A shaking screen operated by steam engine has been installed on top of the bunkers, the bunkers having been housed in from the ground to the tippie floor and heaters installed.

Dawson Coal Co., Ltd. (Mine No. 155).

Mine Office: River Lot 25, Edmonton Settlement.
 Head Office: McDougall Court, Edmonton, Alberta.
 Authorized Capital: \$30,000.00.
 President: Richard Secord.
 Vice-President: J. Henderson.
 Directors: Richard Secord, J. Henderson, H. J. Dawson.
 Sec.-Treas.: C. A. Hyndman.
 General Manager: C. A. Hyndman.
 Manager: Norman Fraser.
 Overman: Levi Parker.
 Mine Surveyor: Norman Fraser.
 Location of Mine: River Lot 25, Edmonton Settlement.
 Area: 160 acres. Character of coal: Lignite.
 Owners of Property: H. J. Dawson and J. D. Hyndman, McDougall Court, Edmonton.

The seam which is being worked at this mine is 5 ft. 6 inches in thickness, with clay shale roof and pavement, the strata is practically level, the cover being from 90 ft. to 250 ft. in thickness.

The mine is located on the south side of the North Saskatchewan river in Edmonton, and is entered by means of shafts 16 ft. long by 6 ft. wide by 114 ft. deep.

The room and pillar system of working is adopted. Entries are driven 6 and 8 ft. wide by 6 ft. high, the rooms being 12 ft. wide by 5 ft. high, with pillars between rooms 38 ft. wide by 50 ft. long.

The plant has a capacity of 300 tons per day, the mine cars holding 1,000 lbs.

This mine has no railway connection, the output being hauled away by teams and disposed of in the City of Edmonton.

Twin City Coal Co., Ltd. (Mine No. 177).

Mine Office: Edmonton South.
 Head Office: Toronto, Ontario.
 Authorized Capital: \$600,000.00.
 President: R. L. McIntyre.
 Directors: R. L. McIntyre, J. H. McGregor, O. Baird, James Sinclair, J. A. Morden, H. C. Anderson.
 Secretary: James Sinclair.
 General Manager: H. C. Anderson.
 Manager: L. C. Stevens.
 Overman: R. Rawlinson.
 Examiners: William Foster, R. Graham.
 Mine Surveyor: L. C. Stevens.
 Location of Mine: Block F, River Lot 17, Edmonton Settlement.
 Area: 367 acres. Character of coal: Lignite.
 Owner of Property: Twin City Coal Co., Ltd., Toronto, Canada.

The No. 2 seam which is being worked at this mine is 6 ft. in thickness, with clay sandstone roof and clay pavement, the strata dips 2

degrees in a south-westerly direction, the cover having a thickness of 167 feet.

The mine is located on Mill Creek, in Edmonton, and is entered by means of two shafts, the hoisting shaft being 174 ft. long by 6 ft. wide, the air shaft being circular, is 8 ft. diameter by 180 ft. deep.

The room and pillar system of working is adopted. Entries are driven 9 ft. wide by 7 ft. high, the rooms being 18 ft. wide by 6 ft. high, with pillars between rooms 18 ft. wide by 50 ft. long.

The plant has a capacity of 600 tons per day, the mine cars holding 1,400 lbs.

The main and tail rope system of haulage is employed on the main entry, horses being used for gathering purposes.

The coal is mined by coal-cutting machines of the Radial post type, operated by compressed air, all shots being fired by electric battery, the explosive used being Monobel No. 1.

Safety lamps of the Wolf type are used throughout the mine, the shaft bottom being lighted by incandescent electric lights in conduits.

A fire occurred at this mine on February 28th, 1915, which destroyed the boiler and engine houses, which were of frame construction, the cause of the fire, while not positively established, was thought to be through an explosion of dusty coal slack in the furnace of the Robb-Mumford water tube boiler, the force of this supposedly caused the flame to be projected through a hole in the smoke stack to the rafters of the building.

The following improvements and additions have been made during the year: Boiler house, 36 ft. 8 inches by 42 ft. 4 inches long, with engine house and machine shop 38 ft. 8 inches wide by 57 ft. 8 inches long, built of brick, have been erected, replacing the buildings destroyed by fire; 3 return tubular boilers of 150 H.P. each have been installed, also a feed water heater. The steam hoist and one air compressor have been rebuilt. A lathe has been added to machine shop equipment; steam coils have been placed at entrance to air shaft and a 7 K.W.D.C. generator has been installed for lighting purposes.

North American Collieries, Ltd. (Mine No. 267).

Mine Office: St. Albert.

Head Office: 1021 Transportation Building, Montreal, Quebec.

Authorized Capital: \$1,000,000.00.

President: H. A. Lovett, K.C.

Vice-Presidents: Hon. Robert MacKay and Parmely W. Herrick.

Directors: H. A. Lovett, K.C., Hon. Nathaniel Curry, Hon. Robert MacKay, Parmely W. Herrick, R. M. Ballantyne, J. N. Greenshields, J. W. Pyke and J. B. Ferguson.

Secretary: P. F. Brown; **Assistant:** S. T. Mains.

General Superintendent: N. C. Pitcher.

Manager: Thomas O'Donnell.

Overman: William Allen.

Examiner: Peter Allen.

Mine Surveyor: Thomas O'Donnell.

Location of Mine: N.W. $\frac{1}{4}$, Sec. 28, Tp. 53, Rge. 25, West of the 4th Mer.

Area: 1,100 acres. **Character of coal:** Lignite.

Owner of Property: North American Collieries, Ltd., Montreal, Quebec

The seam which was being worked had a thickness of $7\frac{1}{2}$ ft., with clay roof and pavement, the strata dips 3 degrees in an easterly direction, the cover having a thickness of 312 ft.

The mine is located near St. Albert, and is connected to the Athabasca branch of the Canadian Northern Railway by a short spur, and is entered by means of a shaft of the following dimensions: 29 ft. dia. by 97 ft. deep, 14 ft. square by 75 ft. deep, and 13 ft. square by 140 ft. deep to the coal, making a total depth of 312 ft.

The system of working intended to have been adopted was room and pillar, but only the entries were driven. These were 8 ft. wide by 7 ft. high, with pillars between entries 68 ft. wide by 100 ft. long.

This mine was abandoned during the year, the plant being dismantled.

NAMAO DISTRICT.—DISTRICT NO. 27.

Sturgeon Consolidated Collieries, Ltd. (Mine No. 101).

Mine Office: Namao.
 Head Office: Agency Building, Edmonton, Alberta.
 Authorized Capital: \$50,000.00.
 President: D. M. Duggan.
 Vice-President: David Jones.
 Directors: J. J. Duggan, David Astley, D. M. Duggan, David Jones.
 Sec.-Treas.: J. J. Duggan.
 General Manager: D. M. Duggan.
 Manager: David Jones.
 Overman: David Astley.
 Mine Surveyor: David Jones.
 Location of Mine: N.W. $\frac{1}{4}$, Sec. 9, Tp. 55, Rge. 24, West of the 4th Mer
 Area: 160 acres. Character of coal: Lignite.
 Owner of Property: H. Bell, Namao, Alberta.

The seam which is being worked at this mine has a thickness of $5\frac{1}{2}$ ft., with coal and clay roof and clay pavement, the strata is practically level, the cover being 68 ft. in thickness.

The mine is located in the Sturgeon Valley, 17 miles north of Edmonton, and is entered by means of a shaft 11 ft. 2 inches long by 7 ft. 7 inches wide, also a drift 7 ft. wide by $5\frac{1}{2}$ ft. high, driven in from the outcrop.

The room and pillar system of working is adopted. Entries are driven 7 ft. wide by $5\frac{1}{2}$ ft. high, the rooms being 12 ft. wide by 5 ft. high, with pillars between rooms 10 ft. wide by 60 ft. long.

The plant has a capacity of 150 tons per day, the mine cars holding 1,000 lbs. The cages have been made self-dumping during the year, additional guides being placed in the shaft for the purpose.

Connection is made with the main line of the Edmonton, Dunvegan and British Columbia Railway by means of a short spur.

Frank Smith. (Mine No. 389).

Mine Office: Namao.
 Overman: Frank Smith.
 Mine Surveyor: Norman Fraser.
 Location of Mine: N.E. $\frac{1}{4}$, Sec. 8, Tp. 55, Rge. 24, West of the 4th Mer
 Area: 20 acres. Character of coal: Lignite.
 Owner of Property: H. Speers, Namao, Alberta.

The seam being worked at this mine has a thickness of 5 ft. 8 inches, with clay roof and pavement, the strata is practically level, the cover having a thickness of 48 ft.

The mine is located in the Sturgeon Valley, 18 miles north of Edmonton, and is entered by drifts 6 ft. high by 5 ft. wide.

The room and pillar system of working is adopted. Entries are driven 5½ ft. wide by 6 ft. high, the rooms being 8 to 10 ft. wide by 5 ft. 6 inches high, with pillars between rooms 30 ft. wide by 50 ft. long.

The mine produces 10 tons per day, the mine cars holding 800 lbs.

The product is disposed of to the settlers in the vicinity.

Porte, Allen & Jackson. (Mine No. 397).

Mine Office: Namao.

Head Office: 416 McLeod Building, Edmonton, Alberta.

Manager: A. N. Scott.

Mine Surveyor: A. N. Scott.

Location of Mine: S.E.¼, Sec. 8, Tp. 55, Rge. 24, West of the 4th Mer.

Area: 160 acres. Character of coal: Lignite.

Owner of Property: Mrs. E. Kelly, Namao P. O., Alberta.

The seam being worked at this mine has a thickness of 5 ft., with clay roof and pavement, the strata is practically level, the cover being from 30 to 90 ft. in thickness.

The mine is located in the Sturgeon Valley, 16 miles north of Edmonton, and is entered by means of a drift 6 ft. high by 8 ft. wide, also a shaft 12 ft. long by 5 ft. wide by 80 ft. deep.

The system of working adopted is room and pillar. Entries are driven 8 ft. wide by 6 ft. high. No rooms have been opened up as yet; pillars between entries are 70 ft. wide by 100 ft. long.

The mine produces 50 tons per day, the mine cars holding 800 lbs.

The output of the mine is disposed of locally.

Schallert & Youngberg. (Mine No. 645).

Mine Office: Namao.

Head Office: General Delivery, Edmonton, Alberta.

Overman: Antoine Alphonse Avignon.

Location of Mine: S.W.¼, Sec. 6, Tp. 55, Rge. 24, West of the 4th Mer.

Area: 160 acres. Character of coal: Lignite.

Owner of Property: John T. Flynn, Namao, Alberta.

This mine is located in the Sturgeon Valley, 14 miles north-west of Edmonton, and consists of a drift 6 ft. 6 inches high by 6 ft. wide.

A prospecting tunnel only has been driven for a distance of 160 ft., no coal of workable quality having been found, the mine is closed at present.

CARDIFF DISTRICT.—DISTRICT No. 28.

Cardiff Collieries, Limited. (Mine No. 32).

Mine Office: Cardiff and Agency Building, Edmonton.
Head Office: Winnipeg, Manitoba.
Authorized Capital: \$700,000.00.
President: Andrew Kelly.
Vice-President: J. C. Gage.
Directors: Andrew Kelly, J. C. Gage, J. B. Allison, G. H. Eaton, J. M. de C. O'Grady, C. J. Stainer.
Secretary: A. Cooper.
Managing Director: G. H. Eaton.
Manager: David Jones.
Overman: Alex. McGregor.
Mine Surveyor: David Jones.
Location of Mine: N.W. $\frac{1}{4}$, Sec. 24, Tp. 55, Rge. 25, West of the 4th Mer
Area: 630 acres. Character of coal: Lignite.
Owner of Property: Cardiff Collieries, Ltd., Winnipeg, Manitoba.

This mine is working a seam which has a thickness of 16 ft., with clay roof and pavement, and is practically level, with a cover of 30 ft.

The mine is entered by means of a double tracked slope 18 ft. wide by 6 ft. 6 inches high on a pitch of 18 degrees.

The system of working is room and pillar, main entries being driven 14 ft. wide by 9 ft. high, side entries 16 ft. wide by 9 ft. high, the rooms being 20 to 26 ft. wide by 9 ft. high, with pillars between rooms 15 ft. wide by 60 ft. long. All coal is undercut by electrically operated chain machines.

The coal is hoisted from foot of slope to tippie level by means of an endless rope having cast iron dogs attached by means of bolts to the rope, which engage angle irons bolted to the base of cars, hoisting them to the tippie, and retarding empties on their return. The tippie is equipped with weigh basket and shaking screens making 4 sizes of coal.

The capacity of the plant is 2,000 tons per day, the mine cars holding 5,000 lbs.

The plant consists of 2 return tubular boilers of 150 H.P. each, a 100 K.W. electric generator belt connected to a steam engine and steam-driven fan direct connected.

The wash-house is equipped with shower baths and lockers and is steam heated.

Open lights of the carbide type are used throughout the mine, also electric lights are installed at switches, sidings and along the main entry.

The fires which broke out in this mine are still burning, those to the west of the slope, however, seem to be under control. The fire in the section north of the slope is gradually gaining, stoppings are being built of logs faced with clay, and men are kept constantly patrolling the fire section, hose pipe with water connections being kept ready for use. The cause of the fire spreading in this section is probably due to the fact that 4 to 6 ft. of coal is left up as a roof support, and when the places cave this coal lies on the floor and gives the fire an opportunity to travel under the caves.

An attempt is being made to overcome this by removing all coal up to the clay roof, also the coal from the floor, and taking out the timber and caving the place.

Alberta Coal Mining Company, Limited. (Mine No. 129).

Mine Office: Cardiff.
Head Office: Bank of B.N.A. Building, Edmonton, Alberta.
Authorized Capital: \$50,000.00.
President: J. L. Bell.
Vice-President: W. L. Carter.
Directors: Geo. S. Montgomery, J. L. Bell, W. L. Carter.
Sec.-Treas.: George S. Montgomery.
General Manager: George S. Montgomery.
Manager: David Jones.
Overman: Gus Ostheidt.
Mine Surveyor: David Jones.
Location of Mine: N.E.¼, Sec. 23, Tp. 55, Rge. 25, West of the 4th Mer.
Area: 320 acres. Character of coal: Lignite.
Owner of Property: Alberta Coal Mining Company, Limited.
Address of Owner: Bank of B.N.A. Building, Edmonton, Alberta.

This mine is working a seam which has a thickness of 16 ft., with clay roof and pavement, the strata is horizontal, with a cover of 40 ft.

The mine is located at Cardiff, 21 miles N.W. of Edmonton, and is connected to the Athabasca branch of the C.N.R. by means of a spur which leaves the main line two miles south of Morinville, and is entered by means of a slope 6 ft. high by 10 ft. wide by 75 ft. long, up which the mine cars are hoisted one at a time to the tippie, the dumping of the cars being done automatically.

The system of working is room and pillar. Entries are driven 10 ft. wide by 10 ft. high, the rooms 15 ft. wide by 10 ft. high, with pillars 20 ft. wide by 70 ft. long between rooms. The capacity of the plant is 600 tons per day, the mine cars holding 3,000 lbs. of screened coal.

The power plant consists of two return tubular boilers at the slope.

Open lights of the carbide type are used throughout the mine. Horses are used to haul cars from working places to the rope haulage.

The coal is sheared by hand picks and blasted, black powder being used for this purpose.

The following additions have been made during the year: Main and tail rope haulage has been put into operation from inside workings to foot of slope. Horizontal bricked-in return tubular 150 H.P. boiler with hoist has been installed on surface to operate haulage 2,750 ft. in length.

Blain & Gilliland. (Mine No. 237).

Mine Office: Cardiff.
Head Office: Room 19, Sandison Block, Edmonton, Alberta.
Authorized Capital: \$5,000.00.
General Manager: J. W. Blain.
Manager: David Jones.
Overman: William Gilliland.
Mine Surveyor: David Jones.

Location of Mine: S.W.¼, Sec. 24, Tp. 55, Rge. 25, West of the 4th Mer.
Area: 160 acres. Character of coal: Lignite.
Owner of Property: Pierre Gervaise, Cardiff, Alberta.

This mine is working a seam which has a thickness of 12 ft., with coal roof and clay pavement, the strata lies in a horizontal position, having a cover of 43 ft.

The mine is entered by means of shafts, one of which is used for hoisting coal, the others for ventilation and travelling ways. These shafts are 6 ft. wide by 6 ft. long by 43 ft. deep.

The mine is located at Cardiff, and is connected to the Athabasca branch of the C.N.R. by a spur three miles long.

The system of working is room and pillar. Main entries are driven 19 ft. wide by 8 ft. high, side entries 10 ft. wide by 8 ft. high, the rooms are 16 ft. wide by 9 ft. high, pillars between rooms 19 ft. wide by 50 ft. long.

The plant has a capacity of 300 tons per day, the mine cars holding 1,000 lbs. The coal is hoisted up the shaft in a self-dumping skip by a steam hoist, dropped over shaking screens and loaded into railway cars.

The following additions and improvements to the plant have been made during the year: New tipple erected with shaking screen, belt driven from steam engine on wood block foundations. The screen is 20 ft. by 5 ft. with a double deck.

WABAMUN DISTRICT.—DISTRICT No. 29.

Island Lake Coal Co., Ltd. (Mine No. 419).

Mine Office: Wabamun.
Head Office: 423 Tegler Building, Edmonton, Alberta.
Authorized Capital: \$10,000.00.
President: E. A. McBain.
Vice-President: F. B. Smith.
Directors: E. A. McBain, W. C. Dunn, F. B. Smith.
Sec.-Treas.: W. C. Dunn.
Manager: Frank B. Smith.
Overman: Joseph C. Machin.
Mine Surveyor: Frank B. Smith.
Location of Mine: L. S. 15, Sec. 9, Tp. 53, Rge. 4, West of the 5th Mer.
Area: 680 acres. Character of coal: Lignite.
Owner of Property: Wabamun Power and Coal Co., Ltd., Edmonton, Alberta.

The seam being worked at this mine has a thickness of 28 ft., with shale roof and clay shale pavement, and is practically level, with cover varying from 50 to 120 ft. in thickness.

The mine is located 2½ miles west of Wabamun, and is entered by a drift 9 ft. high by 7 ft. wide driven 160 ft. through clay and gravel. Only the lower 7 ft. of this seam is worked, the upper portion composed of dirty coal and shale being left up for a roof.

The system of working adopted is narrow work. Entries and rooms are driven 7 ft. wide by 7 ft. high, the pillars between rooms being 28 ft. wide by 60 ft. long.

The plant consists of a tippie equipped with bar screens giving 3 sizes of coal and having a capacity of 250 tons per day of 8 hours, the mine cars holding 1,200 lbs.

Horses are used for haulage. The mine has connection with the G.T.P. railway by means of a short spur.

The following improvements and additions have been made to the plant during the year:

New tippie, built of lumber, 100 ft. long by 32 ft. high. Warehouse, office, wash-house, dining-room and kitchen, club room and 2 cottages.

Consumers' Coal Co., Ltd. (Mine No. 424).

Mine Office: Wabamun.
 Head Office: 10022 104th Ave., Edmonton, Alberta.
 President: John Hagmann.
 Vice-President: Lafayette Jackson.
 Directors: John Hagmann, Lafayette Jackson.
 Secretary: George C. M. Boothe.
 General Manager: Adalbert Wellich.
 Foreman: William Heath.
 Location of Mine: N.E.¼, Sec. 30, Tp. 52, Rge. 4, West of the 5th Mer.
 Area: 160 acres. Character of coal: Lignite.
 Owner of Property: Consumers' Coal Co., Ltd., Edmonton, Alberta.

The seam being worked at this mine has a thickness of 26 ft., with clay roof and pavement, the strata is practically level, the cover being 20 ft. in thickness.

The mine is located on the south side of Wabamun Lake, 45 miles west of Edmonton.

The stripping method of working is adopted, the surface clay being taken off by means of teams and scrapers.

The coal is hauled across Wabamun Lake over the ice in sleighs and loaded in railway cars.

PEMBINA DISTRICT.—DISTRICT No. 30.

North American Collieries, Ltd. (Mine No. 227).

Mine Office: Evansburgh.
 Head Office: 1021 Transportation Building. Montreal, Quebec.
 Authorized Capital: \$1,000,000.00.
 President: H. A. Lovett, K.C.
 Vice-Presidents: Hon. Robert MacKay and Parmely W. Herrick.
 Directors: H. A. Lovett, K.C., Hon. Nathaniel Curry, Hon. Robert MacKay, Parmely W. Herrick, R. M. Ballantyne, J. N. Greenshields, K.C., J. W. Pike and J. B. Ferguson.
 Secretary: P. F. Brown; Assistant: S. T. Mains.
 General Superintendent: N. C. Pitcher.
 Manager: A. A. Miller.
 Overman: S. D. Wark.
 Examiners: Evan Richards, Walt. Williams.
 Mine Surveyor: S. D. Wark.
 Location of Mine: S.E.¼ Sec. 30, Tp. 53, Rge. 7, West of the 5th Mer.
 Area: 10,800 acres. Character of coal: Lignite.
 Owner of Property: North American Collieries, Ltd., Montreal, Quebec.

The seam being worked at this mine has a thickness of 7 ft. 6 inches, with clay roof and shale pavement, the strata is practically level, the cover being 308 ft. in thickness.

The mine is located at Evansburgh, 60 miles west of Edmonton, and was formerly operated by the Pembina Coal Operators, Ltd., the present company having purchased the property.

It is entered by means of two shafts, one 18 ft. long by 12 ft. wide by 308 ft. deep, is a two compartment shaft equipped with self-dumping cages, the other shaft being used for ventilating purposes.

The system of working adopted is room and pillar. Entries are driven 8 ft. wide by 7 ft. high, the rooms being 18 ft. wide by 5 ft. 8 inches high, with pillars between rooms 17 ft. wide by 50 ft. long.

The mine cars are hoisted to the surface and the coal dumped into chutes, from which it passes over screens to railway cars.

Ventilation is produced by a Crawford-McCrimmon fan reversible, direct connected to a steam engine.

Storage battery electric locomotives are used for gathering the mine cars from the faces and along the main entry to shaft bottom. Electric lights are used to light the shaft bottom, siding and locomotive charging station.

Edison electric cap lamps and Wolf safety lamps are used throughout the mine.

The plant has a capacity of 1,000 tons per day of 8 hours, the mine cars holding 3,200 lbs.

JASPER PARK DISTRICT.—DISTRICT NO. 31.

Jasper Park Collieries, Ltd. (Mine No. 280).

Mine Office: Pocahontas.

Head Office: 42 Jasper Ave., West Edmonton, Alberta.

Authorized Capital: \$2,500,000.00.

President: J. L. Washburn.

Vice-Presidents: J. L. Cote, M.P.P. and E. B. Hawkins.

Directors: J. B. Washburn, J. L. Cote, M.P.P., E. B. Hawkins, R. H. Morris, Alexander Leforte, M. H. Alworth, C. A. Duncan.

Secretary: Sidney Grimble.

Treasurer: R. J. Maxwell.

General Manager: R. H. Morris.

Manager: Ira C. Callander.

Overmen: Thos. Shaw, South Side; M. Cranston, North Side.

Examiners: J. F. Brown, T. O. Davies, A. Crawford, South Side; D. Lamond, North Side.

Mine Surveyor: Ira C. Callander.

Location of Mine: L. S. 9, Sec. 6, Tp. 49, Rge. 27, West of the 5th Mer.

Area: 7,689 acres. Character of coal: Bituminous.

Owner of Property: Jasper Park Collieries, Ltd., Edmonton, Alberta.

There are two seams being worked in the south side mine, No. 1 being 12 ft. thick, with sandstone roof and pavement, No. 2 16 ft. thick, the upper 4 ft. only being workable, with shale roof and pavement, the strata dips 60 degrees in a south-westerly direction, the outcrop of No. 2 seam being 343 ft. west of the outcrop of No. 1.

This mine is located at Pocahontas, on the main line of the G.T.P. railroad, 220 miles west of Edmonton, and is entered by a drift 9 ft. high by 10 ft. wide through gravel, the seam being struck at 400 ft. from the portal. At 5,500 ft. a cross measure tunnel 7 ft. high by 8 ft. wide by 484 ft. long has been completed to No. 2 seam, and two entries started to the south-east have been driven about 150 ft.

The angle system of working has been adopted in No. 1 seam. Raises 6 ft. wide by 6 ft. high are driven on the full pitch from the main to counter gangways, 6 ft. by 6 ft. chutes are then driven to the rise, on an angle of 45 degrees. These chutes are driven to the outcrop, and from them 4 ft. by 4 ft. back angles are driven to the rise, and the pillars extracted.

The plant on the south side has a capacity of 1,200 tons per day, the mine cars holding 5,000 lbs.

This company is also operating a mine on the north side of the Athabasca river, near Bedson, on the main line of the C.N.R., to which connection is made by a short spur.

The seams being worked at this mine are as follows: A seam having a thickness of 4 ft., with shale roof and sandstone pavement, and B seam 6 ft. thick, with sandstone roof and pavement.

The main and counter entries only are being driven in the A seam. This seam pitches 60 degrees in a north-easterly direction.

The main entry in the B seam is driven 7 ft. wide by 8 ft. high for a distance of 800 ft., the seam pitching 14 degrees to the south-west.

The plant at this mine has a capacity of 500 tons per day, the mine cars holding 3,000 lbs.

Compressed air locomotives are used for haulage purposes on the south side, horses being used on the north side.

The following improvements have been made during the year:

North Side.—A picking table has been installed with a daily capacity of 100 tons.

South Side.—An addition has been built to the tippie to allow coal to be dumped into a chute to feed boiler house conveyor direct, thus avoiding taking inferior coal through the tippie. The portion of building used as superintendent's office and officials' bath-house has been converted into a wash-house for the workmen, and an addition 26 ft. by 34 ft. built on the west end, which is subdivided into superintendent's office, bathroom for officials and mine rescue station.

Brule Lake Coal Co., Ltd. (Mine No. 429).

Mine Office: Entrance.

Head Office: Toronto, Ontario.

President: F. H. Phippen.

Vice-President: E. G. Ruel.

Directors: Jos. Errington, R. M. Temple, F. W. Tisdale, F. H. Phippen, E. G. Ruel.

Sec.-Treas.: F. B. Ansley.

General Manager: P. C. Andrews.

Manager: Cory Weatherbee.
Examiners: A. C. Brovey, Walter Wrigley, D. J. M. Gwillim.
Mine Surveyor: A. T. Fraser.
Location of Mine: Sec. 15, Tp. 50, Rge. 27, West of the 5th Mer.
Area: 2,560 acres. Character of coal: Bituminous.
Owner of Property: Brule Lake Coal Co., Ltd., Winnipeg, Manitoba.

This mine is located near Errington, on the C.N.R. main line to Vancouver, and is entered by means of drifts 6 ft. 6 inches high by 7 ft. wide.

Considerable folding has taken place in the rock formation so that the pitch of the strata is very irregular.

There are two seams being worked at this mine, the No. 1 having a thickness of 12 ft., with sandstone roof and shale pavement, and No. 2 having a thickness of 6 ft., with sandstone roof and shale pavement.

The system of working is room and pillar. Entries are driven 10 ft. wide by 7 ft. high in No. 1 seam, the rooms being 6 ft. wide by 6 ft. high, with pillars between rooms 50 ft. wide by 60 ft. long. In the No. 2 seam the entries are 6 ft. wide by 6 ft. high, the rooms being 10 ft. wide by 6 ft. high, with pillars between rooms 50 ft. wide by 60 ft. long.

A surface tramway connects all the openings with the tippie, horse haulage being used at present. The plant has a capacity of 300 tons per day of 8 hours, the mine cars holding 2,000 lbs.

The following improvements and additions have been made to the plant during the year:

A spur track 3.1 miles long with a grade of 2.5% has been built from the main line of the C.N.R., also 1,700 ft. of double track siding at the tippie. Tippie built of lumber with chute having a capacity of 150 tons. 30 mine cars holding 3,000 lbs., have been built. 1 boiler house 22½ ft. wide by 35 ft. long, office, wash-house and cook house, 9 cottages each of 5 rooms and bath, 1 of 6 rooms and bath, hospital, and 2 shacks of 2 rooms each, have also been built.

A 50 H.P. boiler, locomotive type, has been installed, providing steam for operating the fans at Nos. 1 and 2 north mines, the exhaust steam from the engine being passed through pipes in order to heat the air entering the mine.

YELLOWHEAD PASS DISTRICT.—DISTRICT No. 32.

Yellowhead Coal Co. (Mine No. 220).

Mine Office: Coalspur.
Manager: John L. Parker.
Examiners: Jos. Sedlock and George Thom.
Mine Surveyor: John L. Parker.
Location of Mine: Sec. 6, Tp. 49, Rge. 21, West of the 5th Mer.
Area: 6,600 acres. Character of coal: Bituminous.
Owner of Property: Yellowhead Pass Coal & Coke Co., Ltd.
Address of Owner: Imperial Bank Chambers, Montreal, Quebec.

This mine is being re-opened, having been closed down in March, 1915, on account of fire in the workings.

A crosscut tunnel is being driven from the outside to tap the main entry inside the fire area.

North American Collieries, Ltd. (Mine No. 233).

Mine Office: Lovettville.
 Head Office: 1021 Transportation Building, Montreal, Quebec.
 Authorized Capital: \$1,000,000.00.
 President: H. A. Lovett, K.C.
 Vice-Presidents: Hon. Robert MacKay and Parmely W. Herrick.
 Directors: H. A. Lovett, K.C., Hon. Nathaniel Curry, Hon. Robert MacKay, Parmely W. Herrick, R. N. Ballantyne, J. H. Greenshields, K.C., J. W. Pyke and J. B. Ferguson.
 Secretary: P. E. Brown; Assistant: S. T. Mains.
 General Superintendent: N. C. Pitcher.
 Manager: Samuel McVicar.
 Overman: Peter J. Murphy.
 Examiners: Dan Jones.
 Mine Surveyor: S. D. Wark.
 Location of Mine: Sec. 3, Tp. 47, Rge. 19, West of the 5th Mer.
 Area: 40,000 acres. Character of coal: Bituminous.
 Owner of Property: North American Collieries, Ltd., Montreal, Quebec.

The following seams are being worked in this mine: No. 1 or Mynheer having a thickness of 14 ft., with sandstone roof and pavement, and No. 2 or Silkstone having a thickness of 12 ft., with shale roof and pavement, the dip of strata is 12 degrees in a south-westerly direction.

This colliery is situated at Lovettville, at the end of the steel on the coal branch of the G.T.P. railway, and is entered by slopes on each seam 7 ft. high by 10 ft. wide driven from the outcrop.

The system of working adopted is room and pillar. Entries are driven 10 ft. wide by 7 ft. 6 inches high, the rooms being 16 ft. wide by 7 ft. 6 inches high, with pillars between rooms 20 ft. wide by 30 ft. long.

The plant has a capacity of 800 tons per day, the mine cars holding 2,000 lbs.

Safety lamps of the Wolf type are used throughout the mine; Monobel No. 1, fired by electric battery, being used for blasting.

Fires broke out in the workings of Nos. 1 and 2 west entries off the south or Silkstone slope in November, 1915. These fires caused considerable trouble and brick stoppings were built to isolate them. This was done successfully and the fires got under control. During the month of May they broke out again, when it was decided to abandon these sections. The water has been allowed to rise above the entrance to No. 1 level west, the pillars being extracted from above the No. 1 level east.

Oliphant-Munson Collieries, Ltd. (Mine No. 648).

Mine Office: Coalspur.
 Authorized Capital: \$500,000.00.
 President: William Oliphant.
 Vice-President: R. H. Munson.
 Directors: Wm. Oliphant, R. H. Munson, L. B. Siedman, E. Henderson, H. Robertson.
 Sec.-Treas.: E. Henderson.
 General Manager: E. Henderson.
 Manager: Morgan C. Milne.
 Overman: John Mather.
 Mine Surveyor: Morgan C. Milne.
 Location of Mine: N.E.¼, Sec. 23, Tp. 48, Rge. 21, West of the 5th Mer.
 Area: 1,921 acres. Character of coal: Bituminous.
 Owners of Property: William Oliphant and R. H. Munson.
 Address of Owners: 1001 Park Boulevard, Victoria, B.C.; 46 W. 52nd St., New York.

The following seams are being worked: No. 1 having a thickness of 9 ft., with soft shale roof and sandstone pavement; No. 2 having a thickness of 12 ft., with black shale roof and pavement, the strata has a dip of 47 degrees in a south-westerly direction.

This mine is located at mile 40 on the Alberta coal branch of the G.T.P., and is entered by means of drifts 9 ft. high by 10 ft. wide.

The system of working adopted is room and pillar, working across the pitch. Entries are driven 10 ft. wide by 9 ft. high, the rooms being 10 ft. wide by 9 ft. high, with pillars between rooms 30 ft. wide by 60 ft. long.

The plant has a capacity of 300 tons per day.

This mine was opened during the year, a tippie having been erected, with chutes for loading railway cars.

PEACE RIVER DISTRICT.—DISTRICT NO. 34.

Charles N. Dunlop. (Mine No. 651).

Mine Office: Grande Prairie.

Operator: Charles N. Dunlop.

Location of Mine: E. $\frac{1}{2}$ L. S. 14, Sec. 35, Tp. 70, Rge. 7, West of the 6th Mer.

Area: 60 acres. Character of coal: Lignite.

Owner of Property: Charles N. Dunlop, Grande Prairie, Alberta.

This mine is located in the valley of Spring Creek, 6 miles south-west of Grande Prairie.

The valley at this point is narrow, and where the mine is located is 100 ft. deep, rising to 200 ft. at a point 250 ft. from the creek.

The seam outcrops on the side of the creek about 20 ft. above the stream bed, the side of the bank is almost vertical.

The mine is entered by means of an entry driven in the coal, a chute being built to take the coal from drift mouth for loading wagons and sleighs on the stream below.

The coal is sold locally to the farmers, and also hauled to Grande Prairie.

The following is a section of the seam taken at the outcrop: Roof, shale; bone, 8 inches; coal, 30 inches; bone, 4 inches; coal, 2 inches, with shale floor. There is a 6 ft. seam of sandstone above the roof shale, the shale being 30 inches thick.

The mine was only worked on a small scale, the coal being taken out by a wheelbarrow. About 18 inches of shale is taken down on the entry.

The coal is a bright, clean lignite, with well-defined cleats.

MOUNTAIN PARK DISTRICT.—DISTRICT NO. 33.

Mountain Park Coal Co., Ltd. (Mine No. 282).

Mine Office: Mountain Park.
Head Office: 301 Tegler Block, Edmonton, Alberta.
Authorized Capital: \$2,500,000.00.
Chairman Board of Directors: C. J. Leyland.
Directors: C. J. Leyland, R. W. Jones, N. M. Thornton, J. R. F. Kirkpatrick, David McGowan.
Sec.-Treas.: G. N. Anderson.
General Manager: N. M. Thornton.
Manager: James Darbyshire.
Overman: H. Crowder.
Examiners: Edward Atherton, C. J. Ferguson, W. J. Mangan, W. Ashton, H. Blake, Thomas H. Nanson, Thos. Fishwick.
Mine Surveyor: R. H. Watson.
Location of Mine: Sec. 33, Tp. 45, Rge. 23, West of the 5th Mer.
Area: 5120 acres. Character of coal: Bituminous.
Owner of Property: Mountain Park Coal Co. Ltd.
Address of Owner: 301 Tegler Block, Edmonton, Alberta.

The following seams are being worked at this mine: the No. 1 seam having a thickness of 4 ft., with hard shale roof and sandstone pavement, and the No. 3 seam having a thickness of 12 ft., with black-jack and coal roof and sandstone pavement, the strata has a dip of from 26 to 75 degrees in a south-westerly direction. The seams all outcrop to the surface.

This colliery is located at the end of the steel on the Mountain Park branch of the G.T.P. Alberta coal branch, and is 70 miles south-west of Edson.

There are 5 openings being worked, 3 on the east side of the valley and 2 on the west side.

The openings on the east side consist of a drift and slope on No. 3 seam, and a drift on No. 1 seam. The west side openings consist of a drift on No. 1 seam and a slope on No. 3 seam.

The drifts are driven in the No. 1 seam 6 ft. high by 7 ft. wide, and in the No. 3 seam 8 ft. high by 8 ft. wide. No. 3 west slope being 7 ft. high by 8 ft. wide by 350 ft. long, and No. 3 east slope being 7 ft. high by 8 ft. wide by 700 ft. long, both slopes having an inclination of 26 degrees.

The room and pillar system of working is adopted, entries being driven 8 ft. wide by 8 ft. high in No. 3 seam, and 7 ft. wide by 6 ft. high in No. 1 seam, the rooms being 16 ft. wide in No. 1 seam by 4 ft. high, and 12 ft. wide in No. 3 seam by 12 ft. high, with pillars 38 ft. wide by 60 ft. long.

The plant consists of a tippie which spans the valley, taking the coal from the mines on both sides. Horse haulage is used on the entries underground, and on the surface to the tippie. An electric motor hoist operates the No. 3 west slope, while a steam hoist is in use at the No. 3 east slope.

A reverse fault was encountered in the No. 3 east main entry. This has been passed and the seam is normal again.

Safety lamps of the Wolf type are used throughout the mine, all blasting being done by No. 1 Monobel fired by electric battery.

The following improvements have been made during the year :

A new steam-driven hoist 24 by 36 inches, connected by band friction clutches to 5 dia. double drums which work independently on the shaft, has been installed for the purpose of hoisting the coal from No. 3 east slope.

Four new return tubular boilers of 150 H.P., each carrying 150 lbs. steam pressure, have been installed for operating the above hoist and the electric generators producing power for pumping and lighting.

A 50 H.P. electric hoist has been installed for hoisting cars up No. 3 west slope, fan erected and installed at No. 3 east slope, belt connected to 20 H.P. motor.

Armoured cable has been installed on the east and west slopes for conveying electric power to the pumps at the foot of these slopes.

John B. Taft. (Mine No. 652).

Mine Office: Grande Prairie.

Location of Mine: N.E. $\frac{1}{4}$ Sec. 35, Tp. 70, Rge. 7, West of the 6th Mer.

Area: 20 acres.

This was a prospect tunnel driven in a distance of 25 ft., the coal seam being 16 inches thick, with shale roof and floor.

The banks of the creek at this point rise to a height of 250 feet and are nearly perpendicular. This mine is now abandoned.

George Alex. Ray. (Mine No. 653).

Mine Office: Halcourt.

Location of Mine: S.E. $\frac{1}{4}$ Sec. 25, Tp. 70, Rge. 11, West of the 6th Mer.

This is a stripping proposition on the banks of the Red Willow river, about 35 miles south-west of Grande Prairie.

The seam of coal is 16 inches thick, the coal being hand picked, sacked and sold for blacksmith purposes at Grande Prairie.

Walter H. Waldo. (Mine No. 654).

Mine Office: Halcourt.

Location of Mine: N.W. $\frac{1}{4}$ Sec. 24, Tp. 70, Rge. 11, West of the 6th Mer.

Area: 40 acres. Character of coal: Lignite.

Owner of Property: Walter H. Waldo, Halcourt, Alberta.

This mine is located on the south bank of the Red Willow river, 40 miles south-west of Grande Prairie.

Work consisted last winter in stripping the surface off the coal by means of picks and shovels. It is the intention next winter to drive entries in the coal from the river bank. Local trade only is supplied. The coal is of good quality.

Samuel H. Brown. (Mine No. 655).

Mine Office: Halcourt.

Location of Mine: L. S. 6, Sec. 21, Tp. 70, Rge. 10, West of the 6th Mer.

Area: 40 acres. Character of coal: Lignite.

Owner of Property: Samuel H. Brown, Halcourt, Alberta.

This mine is located on the banks of the Red Willow river, 33 miles south-west of Grande Prairie and $3\frac{1}{2}$ miles south of Halcourt P. O.

The mine is worked as a stripping proposition, the seam being 21 in. thick. Coal is sold locally.

John K. Finigan. (Mine No. 656).

Mine Office: Halcourt.

Location of Mine: S.W. $\frac{1}{4}$ Sec. 25, Tp. 70, Rge. 11, West of the 6th Mer.

Owner of Property: John K. Finigan, Halcourt, Alberta.

This mine is located on the north bank of Red Willow river and consists of a short entry driven in the coal from the bank of the river.

The coal is of an average thickness of 38 inches and of good quality.

The mine is worked for local trade, the nearest railway being at Grande Prairie, 40 miles east.

Earl Coldren. (Mine No. 657).

Mine Office: Peace River Crossing.

Location of Mine: L. S. 3, Sec. 28, Tp. 83, Rge. 21, West of the 5th Mer.

Character of coal: Shale and coal mixture.

Owner of Property: Earl Coldren, Peace River Crossing, Alberta.

Only prospecting work has been done on this property.

BOARD OF EXAMINERS.

The constitution of this Board during the year 1916 was as follows:

As representing:

(a) The Mine Inspectorate:

John T. Stirling, Chief Inspector of Mines.

(b) Managers:

Messrs. Robert Livingstone and William A. Davidson.

(c) Miners:

Messrs. Evan Morgan and Andrew Goodwin.

A meeting of the Board was held at Coleman on May 18th, 1916, when the following local examiners were appointed:

Crow's Nest Pass District:	W. A. Davidson. Louis P. Robert. William Shaw.
Lethbridge District:	Robert Livingston. Duncan McDonald.
Calgary District:	John Watters. Francis Aspinall.
Edmonton District:	Norman C. Pitcher. Leonard C. Stevens. Norman Fraser.
Mountain Park District:	James Darbyshire. James A. Richards. W. A. Davidson.
Pembina District:	Joseph B. deHart. James A. Richards.
Jasper Park District:	Andrew N. Scott. James A. Richards.

Examinations were held during the year as follows:

For First and Second Class Certificates on June 7th, 8th and 9th, at Blairmore, Lethbridge, Calgary, Edmonton and Mountain Park.

For Third Class Certificates on June 5th and 6th at Blairmore, Lethbridge, Calgary, Edmonton and Mountain Park; on September 5th at Mountain Park; on September 15th at Edmonton; on October 13th at Evansburgh; on October 17th at Edmonton, and on November 9th at Pocahontas.

For Mine Surveyors' Certificates on June 1st and 2nd at Blairmore, Lethbridge, Calgary and Edmonton.

Ten candidates presented themselves for examination for First Class Certificates, of whom four were successful; thirty for Second Class Certificates, of whom sixteen were successful; fifty-six for Third Class Certificates, of whom thirty-nine were successful, and six for Mines Surveyors' Certificates, of whom three were successful.

Owing to the trouble being experienced in obtaining a sufficient number of certificated officials, examinations for Third Class Certificates were held throughout the Province at different times of the year.

Several applicants were refused authority to present themselves at the examinations, as they had not undergone training in Mine Rescue Work as required by the examination rules.

During the year, 157 Provisional Certificates were issued authorizing the holders of these certificates to act as overmen until they had an opportunity of obtaining certificates by examination. No Third Class Provisional Certificates have been issued during the year.

The following are the questions set at the examinations for First Class, Second Class and Mine Surveyors' Certificates held during the year.

FIRST CLASS CERTIFICATES.

Marks Obtainable, 200.

Marks Required, 120.

Paper No. 1.

Time—Three Hours.

THE MINES ACT.

Values.

1. What are the general provisions of The Mines Act relative to ventilation and at what points is it necessary to measure the ventilating current? 25
2. What are the general provisions of The Mines Act relative to manholes on travelling roads and signals? 20
3. What are the special provisions and instructions of The Mines Act governing the duties of persons employed underground? 20
4. State the provisions of The Mines Act dealing with control of the supply of electric current to a mine; also state what notices for workmen are to be exhibited. 25
5. How is a check-weigher appointed and what are his duties? 25
6. What is a manager's duty when an accident occurs at a mine? 25
7. The Mines Act makes numerous general provisions in connection with the use and care of explosives; state briefly what in your opinion is the special danger or dangers each provision seeks to guard against. 35
8. Outline a suitable code of signals for use in a mine entered by shafts. Explain the necessity for such code. What are the respective duties of the banksman, cager and onsetter? 25

FIRST CLASS CERTIFICATES.

Marks Obtainable, 200.

Marks Required, 120

Paper No. 2.

Time—Three Hours.

*THEORY AND PRACTICE OF VENTILATION.**Values.*

1. State briefly the composition and properties of the various gases met with in coal mines. 20
2. State what regulations are necessary to ensure proper care and protection of the ventilating appliances at a mine. 20
3. The upcast shaft is used for hoisting purposes and the fan is exhausting. Sketch and describe the arrangements at the top of the shaft necessary for proper ventilation. 30
4. The intake air enters the mine 500 feet vertically above the opening where the fan is situated. Would you expect the same quantity of air in summer and winter when the speed of the fan is constant? Give reasons. 30
5. A mine is being equipped for an output of 2,000 tons per day. What factors would you take into account in deciding the capacity of ventilating fan? Sketch an outline of the fan giving various dimensions. 30
6. A mine has three ventilating districts. In district A the airway is 6 feet by 8 feet, in district B, 8 feet by 10 feet, and in District C, 10 feet by 10 feet. What will be their relative lengths if each district is getting an equal quantity of air without the use of regulators? 30
7. During the course of work you receive a report that the fan has stopped and cannot be started again for thirty minutes. What instructions would you give with regard to underground operations? 20
8. Describe fully any form of portable electric lamp suitable for mine use, noting the parts that require to be examined carefully before it is taken underground. 20

FIRST CLASS CERTIFICATES.

Marks Obtainable, 200.

Marks Required, 120.

Paper No. 3.

Time—Three Hours.

*SURVEYING.**Values.*

1. Plot the following notes from a mine survey and calculate the bearing and length of the line from St. 4 to St. 1: 25

<i>Station.</i>	<i>Bearing.</i>	<i>Distance in feet.</i>
1—2	S14°00'E	140
2—3	N78°30'E	210
3—4	N20°00'E	95



BOILER ROOM, NO. 6 MINE, CANADIAN PACIFIC RAILWAY COMPANY, DEPARTMENT OF NATURAL RESOURCES, LETHBRIDGE.



INTERIOR OF MINE RESCUE CAR NO. 1.

2. What are the adjustments which can be made to the Engineer's Level in the field? 20
3. A slope dips 20 degrees from the horizontal. It is 800 feet in length. Calculate the difference in elevation between the top and bottom of the slope. 15
4. It is necessary to drive a curve to connect two haulage roads. How would you set out this curve with a transit? 15
5. What are contour lines? What are their uses? Describe briefly how you would lay off and map contour lines of a piece of land at intervals of 5 feet vertical? 20
6. A longitudinal section along the line of a railway shows the depth of cutting at 300, 400 and 500 feet to be 6, 8 and 13 feet respectively. The cross sections at these stations show the surface to be level transversely to the line of railway. The cutting is 15 feet wide at the bottom of cut and the slopes are 1 vertical to $1\frac{1}{2}$ horizontal. Draw a cross-section at each station to a scale of 1 inch to 10 feet and calculate the amount of cutting between the 400 and 500 foot stations. 25
7. The area of a coal property is 160 acres. The seam of coal is 5' 6" thick, but contains a 3" band of shale. It is found that when screened, the nut and slack amount to 35 per cent. of the output. How much lump coal can be extracted from the property, if 20 per cent. of the total cost is lost in mining? The specific gravity of the coal is 1.3. 20
8. State fully the provisions of The Mines Act regarding plans. 20
9. The plan of a tied-in survey as required by Rule 3 (a) (v) of the Rules as to Qualifications of Applicants for First, Second and Third Class Certificates of Competency, must be handed in with the answers to this paper. 20
10. The plan of an underground levelling as required by Rule 3 (a) (v) of the Rules as to the Qualifications of Applicants for First, Second and Third Class Certificates of Competency, must be handed in with the answers to this paper. 20

FIRST CLASS CERTIFICATES.

Marks Obtainable, 200.

Marks Required, 120.

Paper No. 1.

Time—Three Hours.

PRACTICAL WORK.

Values.

1. Give a brief geological description of the coal bearing areas of Alberta. 28
2. The method of work generally practised in the lignite and bituminous fields of Alberta is room and pillar. What in your opinion is the reason that the long-wall method is not practised? 28

3. It is proposed to "raise" an airshaft 6 feet by 8 feet from the underground workings to the surface, a distance of 150 feet. Describe in detail how you would do this. 29
4. A rock-tunnel 10 feet by 7 feet has to be driven across the measures to strike a coal seam. Give full particulars of how you would proceed with the work and the length of time it would take to complete the tunnel. 28
5. Describe with sketches the lay-out of a surface plant at a colliery to handle 1,000 tons per day. 29
6. What are the various kinds of coal-cutting machines with which you are acquainted? What are the advantages and disadvantages of each? Give comparative figures as to the cost of pick mining and machine mining in any district in Alberta. 29
7. How would you take a 50 H.P. hoisting engine into a mine, erect it in position and fix solidly at the top of a slope dipping 25 degrees? It is necessary to back switch the cars from the slope to the haulage level. 29

FIRST CLASS CERTIFICATES.

Marks Obtainable, 200.

Marks Required, 120.

Paper No. 5.

Time—Three Hours.

EXPLOSIONS, UNDERGROUND FIRES AND INUNDATIONS.

Values.

1. In a dry and dusty mine what steps would you take to ensure immunity from:
 - (a) Ignition of coal dust?
 - (b) Propagation of flame after ignition? 30
2. In opening up a coal mine in a coal field where it is known that both inflammable gas and dust will be encountered, describe how you would lay out the workings with a view to the introduction of some means of diminishing the danger from explosion and localizing the area affected. 30
3. A working place has unexpectedly broken through into old abandoned workings. What danger would you anticipate from this source and what steps would you take to allow of operations being conducted safely? 25
4. What are the usual causes of underground fires and what precautions are necessary to prevent their origin? 25
5. What treatment would you apply to a person overcome while working at a gob fire? Describe the action of a pulmotor or lungmotor and give the advantages and disadvantages of each. 20
6. Describe some form of self-contained breathing apparatus and state what precautions should be taken by a person wearing same. 25

- | | |
|--|----|
| 7. Describe an hygrometer and its uses. | 20 |
| 8. Under what conditions are humidity tests of the mine atmosphere of value? | 25 |

FIRST CLASS CERTIFICATES.

Marks Obtainable, 200.

Marks Required, 120.

*Paper No. 6.**Time—Three Hours.**MACHINERY.**Values.*

- | | |
|--|----|
| 1. Define mean effective pressure, indicated horse-power and brake horse-power as applied to steam engines. | 20 |
| 2. A slope is 4,000 feet long with an inclination of 18 degrees. It is required to haul 1,000 tons of coal up this slope in 8 hours. What other factors is it necessary to assume in order to determine the size of engine and diameter of rope necessary? | 25 |
| 3. Calculate the size of engine and diameter of rope necessary in above question. | 25 |
| 4. Describe the type of pump you would install to pump 300 gallons of water per minute under a head of 600 feet. What horse-power would be needed? | 30 |
| 5. State briefly the regulations in connection with the use of electricity underground. | 20 |
| 6. What type of electric motor would you use underground and what kind of cable would you use for conveying power to the motor? If the voltage is 250 and the current available is 30 amperes, find the horse-power of the motor. | 30 |
| 7. Describe the safety appliances used in connection with machinery on hoisting shafts. | 25 |
| 8. How would you ascertain the size of a wooden beam 10 feet long and supported at the end to sustain a load of 20 tons distributed evenly? | 25 |

SECOND CLASS CERTIFICATES.

Marks Obtainable, 200.

Marks Required, 100.

*Paper No. 1.**Time—Three Hours.**THE MINES ACT.**Values.*

- | | |
|--|----|
| 1. An overman is in charge of a mine employing about twenty men. Describe fully what his duties are, there being no manager employed. | 24 |
| 2. Owing to a derangement of the ventilating current, it is necessary to withdraw the workmen from a mine. What must be done before the workmen are re-admitted to the mine? | 20 |

3. What precautions would you take when your mine was approaching old workings likely to contain a dangerous accumulation of water or gas? 20
4. What are the provisions of the electrical rules regarding, (a) lighting, (b) telephones, (c) fire buckets, (d) plans. 18
5. What report books are to be kept at a mine to comply with The Mines Act? 20
6. What are the regulations which prohibit matches, pipes, etc., from being taken into a mine? Describe the method you would adopt in searching workmen for matches. When can such a search be made? 20
7. What are the regulations of The Mines Act regarding the construction of mine cars? 18
8. What are the various provisions of The Mines Act designed for safety in connection with raising and lowering workmen in shafts? 20
9. All mines have to be examined before work is commenced. What are the requirements of The Mines Act regarding the inspections of a mine where gas has been found within the preceding twelve months? In what particulars do these inspections differ from the inspections necessary in case of a mine where gas has not been found within the preceding twelve months? 20
10. Marks obtainable for oral examination. 20

SECOND CLASS CERTIFICATES.

Marks Obtainable, 200.

Marks Required, 100.

Paper No. 2.

Time—One and One-half Hours.

VENTILATION.

- | | <i>Values.</i> |
|--|----------------|
| 1. Of what value are regular readings of the barometer, thermometer, water gauge and hygrometer? | 20 |
| 2. What is meant by the term "ventilating pressure"? | 20 |
| 3. State the chemical composition and physical properties of the gases met with in coal mines. | 30 |
| 4. Under what conditions would you expect to find the various mine gases? | 30 |
| 5. In ventilating a mine which has two ventilating districts you find that the tendency is for all the air to circulate in one district. What would cause this and how would you equalize the amount in each district? | 25 |
| 6. If firedamp at its most explosive point is ignited what are the resultant gases? What would be the effect if coal dust was also ignited? | 30 |

- 7 If a fan engine is developing 20 horsepower and the total quantity of air circulating is 50,000 cubic feet per minute, what would the water gauge read? 25
8. Marks obtainable for oral examination. 20

SECOND CLASS CERTIFICATES.

Marks Obtainable, 200.

Marks Required, 100.

Paper No. 3.

Time—One and One-half Hours.

EXPLOSIONS, UNDERGROUND FIRES AND INUNDATIONS

Values.

1. What are dust zones and what application have they to coal mining? 40
2. Describe fully any breathing apparatus you are familiar with suitable for use underground in a vitiated atmosphere. 20
3. What causes spontaneous heating underground and what methods are employed to prevent gob fires in mines subject to heating? 30
4. In sealing off a mine fire only four stoppings are necessary, two on the intake and two on the return side of the affected district. Describe the nature of the stoppings you would put up and how you would proceed with the work. 30
5. Describe what is meant by the term "Relative humidity of the air." In what way might the safety of a mine be affected from this source. 30
6. What treatment would you apply to a man suffering from electric shock? 30
7. Marks available for oral examination. 20

SECOND CLASS CERTIFICATES.

Marks Obtainable, 200.

Marks Required, 100.

Paper No. 4.

Time—One and One-half Hours.

SURVEYING.

Values.

1. A borehole strikes a coal seam at a depth of 75 feet. A slope is commenced at a point 200 feet distant from the borehole so as to strike the seam at the same point as the borehole. What will be the length of the slope? 36
2. Plot the following survey notes on a scale of 1 inch to 100 feet:

<i>Station.</i>	<i>Bearing.</i>	<i>Distance in feet.</i>
1—2	N3°15'E	105
2—3	N8°15'W	93
3—4	S80°30'E	216
4—5	S56°00'W	40

3. A roadway 7 feet wide rises 6 feet in the first 200 feet and falls 2 feet in the next 200 feet. It is proposed to brush this roadway so as to give it a uniform grade. The cost of brushing is 75 cents per cubic yard. What will be the total cost? 36
4. What are the uses of mine plans and why is it necessary to keep them? On what scale should mine plans be constructed? 36
5. What is the weight of a solid block of coal 3' 4" by 2' 6" by 4' 1" when the specific gravity of the coal is 1.3? 36
6. Marks available for oral examination. 20

SECOND CLASS CERTIFICATES.

Marks Obtainable, 200.

Marks Required, 100.

*Paper No. 5.**Time—One and One-half Hours.**MACHINERY.**Values.*

1. Define breaking strain and factor of safety as applied to steel wire hoisting ropes. 25
2. The total weight to be lifted from the bottom of a shaft 600 feet deep is 6 tons. Calculate the diameter of steel wire rope suitable for lifting this load. 35
3. In the above question, if it takes one minute to raise the load to the surface what will be the horse-power developed by the engine? 35
4. The water end of a single acting pump is 6 inches in diameter and the length of stroke is 14 inches. When the pump is running 60 revolutions per minute how many gallons of water per hour will be discharged? 40
5. What are the regulations in connection with the use of electricity underground? 20
6. How often would you inspect steel wire hoisting ropes and chains? What form would your inspection take and in what way would you prevent deterioration of the ropes? 25
7. Marks available for oral examination. 20

SECOND CLASS CERTIFICATES.

Marks Obtainable, 200.

Marks Required, 100.

*Paper No. 6.**Time—Three Hours.**PRACTICAL WORK.**Values.*

1. Sketch and describe the different kinds of faults or disturbances met with in coal seams, having special reference to mines in the province. 26

2. Draw a section of an electric detonator, stating what it is comprised of. How would you insert the detonator in the cartridge and the cartridge into the shot-hole? 26
3. Compare the advantages and disadvantages in working, (1) directly up the pitch, (2) directly across the pitch, in an inclined bituminous seam. Assume a set of conditions with which you are familiar. 26
4. How would you lay out a small lignite mine with 100 feet of cover? Sketch required. 26
5. Describe with sketches giving all dimensions how would you put in a set of timber in an entry in a lignite mine. Sills are used and there is considerable side pressure, owing to presence of old workings. 25
6. Describe some form of percussive coal-cutting machine. From your experience or observation what area in square feet will such a machine cut in a shift? 25
7. A mine has been worked on the pillar and room system but has been abandoned and the main return airway allowed to cave in. When re-opening the mine by what circumstances would you be guided in deciding between repairing the old airway or driving a new one? 26
8. Marks available for oral examination. 20

MINE SURVEYOR'S CERTIFICATES.

Marks Obtainable, 200.

Marks Required, 120.

Paper No. 1.

Time—Three Hours.

Note—Neatness will be considered.

Values.

1. Explain the terms: True Azimuth, Declination, Contour, Traverse and Magnetic Meridian. 18
2. In the Triangle A B C, B C equals 644 feet, A B equals 725 feet and the angle A C B equals 90°. Find the length of the side A C, the other two angles and the area of the triangle. 6
3. In the Triangle A B C, C B equals 197 feet, A C equals 53 feet and A B equals 240 feet. Find the three angles. 10
4. The transit is set up at the point "A" on the main entry and sighted on the point "B", the bearing from "A" to "B" is N10°30'E.
 At "A" an angle of 72°15' is turned to the right without plunging the telescope and Station 1 is put in at a distance of 61.3 feet.
 At Station 1 an angle is turned to the right of 99°35' and Station 2 is put in at a distance 61.6 feet.
 At Station 2 an angle is turned left 101°27' and Station 3 is put in at 41.2 feet.

At Station 3 an angle is turned left $7^{\circ}38'$ and Station 4 is put in at 39.4 feet.

At Station 4 an angle is turned to the right $7^{\circ}03'$ and Station 5 is put in at a distance of 31.7 feet.

At Station 5 an angle is turned to the right $5^{\circ}43'$ and Station 6 is put in at a distance of 55.2 feet.

At Station 6 an angle is turned to the left $15^{\circ}00'$ and Station 7 is put in at a distance of 47 feet.

At Station 7 an angle is turned to the right $11^{\circ}35'$ and Station 8 is put in at a distance 80 feet.

	Vertical Angle.	Offsets.	
At "A"	$27^{\circ}00'$		
At Station 2	$28^{\circ}30'$	4 ft. right	and 6 ft. left.
At Station 3	$32^{\circ}00'$	3 ft. right	and 7 ft. left.
At Station 4	$21^{\circ}00'$	8.5 ft. right	and 2 ft. left.
At Station 5	$24^{\circ}00'$	2 ft. right	and 7.5 ft. left.
At Station 6	$28^{\circ}30'$	3.5 ft. right	and 6.5 ft. left.
At Station 7	$35^{\circ}00'$	4 ft. right	and 5 ft. left.
At Station 8		5 ft. right	and 5 ft. left.

Put the above information in proper field note-book form with bearings and sketch. 18

5. Where necessary in the above notes calculate the horizontal distances. 8
6. Calculate and make a table of latitudes and departures of the above survey, neglecting the vertical angles. The total latitude of the point "A" being 624.49S. and the total departure being 140.26E. 28
7. Plot on a scale of one inch equals 50 feet Station 8, in relation to point "A." 18
8. How would you put up sights for a room off a main entry, the course between the two plugs of the main entry survey being $N10^{\circ}30'E$, the room to be driven at right angles to the strike which is $N11^{\circ}37'W$? Show rough sketch. 18
9. What are the provisions of "The Mines Act," with reference to plans? 18
10. The plans, profile and notes as required by Rule 4, sub-section (d) of the "Rules Made by the Provincial Board of Examiners, August 4, 1915, as to the Qualifications of Applicants for Certificates of Competency." 38
11. Oral examination. 20

MINE SURVEYOR'S CERTIFICATES.

Marks Obtainable, 200.

Marks Required, 120.

Paper No. 2.

Time—Three Hours.

Note.—Neatness will be considered.

Values.

1. The attached print shows colored red, the holding of a coal

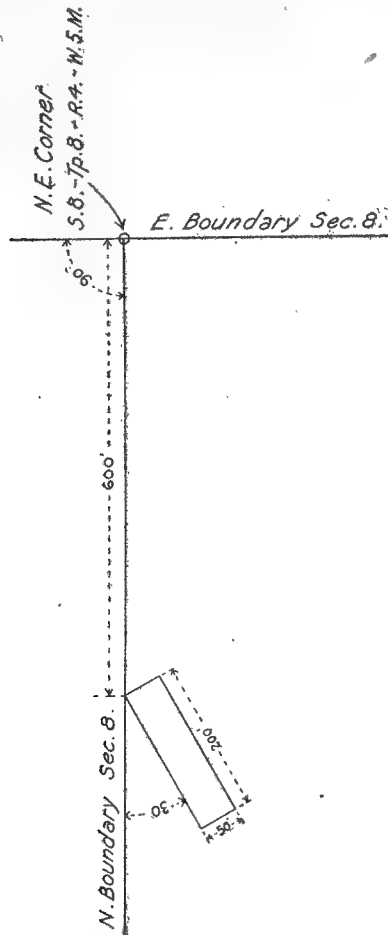
- company in Alberta. What size of canvas back or other durable material would you order to show the complete workings of this property, on a scale of one inch equals 100 feet? 18
2. Tabulate the holdings by sections and calculate the area in acres, of property shown on attached print. 18
3. If the coal seam is 6 feet in thickness and dipping in a westerly direction and the degree of pitch is 33, make an estimate of the total tonnage on the property, assuming the scale of the attached print to be two inches to the mile. 27
4. Work out the following level notes and show a method of checking your calculations. 18

Station.	Back Sight.	Fore Sight.	Height Inst.	Intermed. Sight.	Elevation.	Remarks.
B. M.		5.61			100.00	On root of white oak 10 ft. left Station O.
1				6.1		
2				7.3		
3				9.2		
T. P.	10.22	5.41				
4				6.3		
5				4.2		
5 & 50				11.5		Centre of Spring.
T. P.	2.52	11.57				
6				6.2		
7				8.5		
8				10.1		
B. M.	11.53					New B.M. on pointed rock 12 ft. right Station 8.

5. Plot a profile of the level notes in the last question on a horizontal scale of 1 inch to 100 feet and a vertical scale of one inch to 100 feet. Show a grade line of a half of one per cent. starting from Station 1. 27

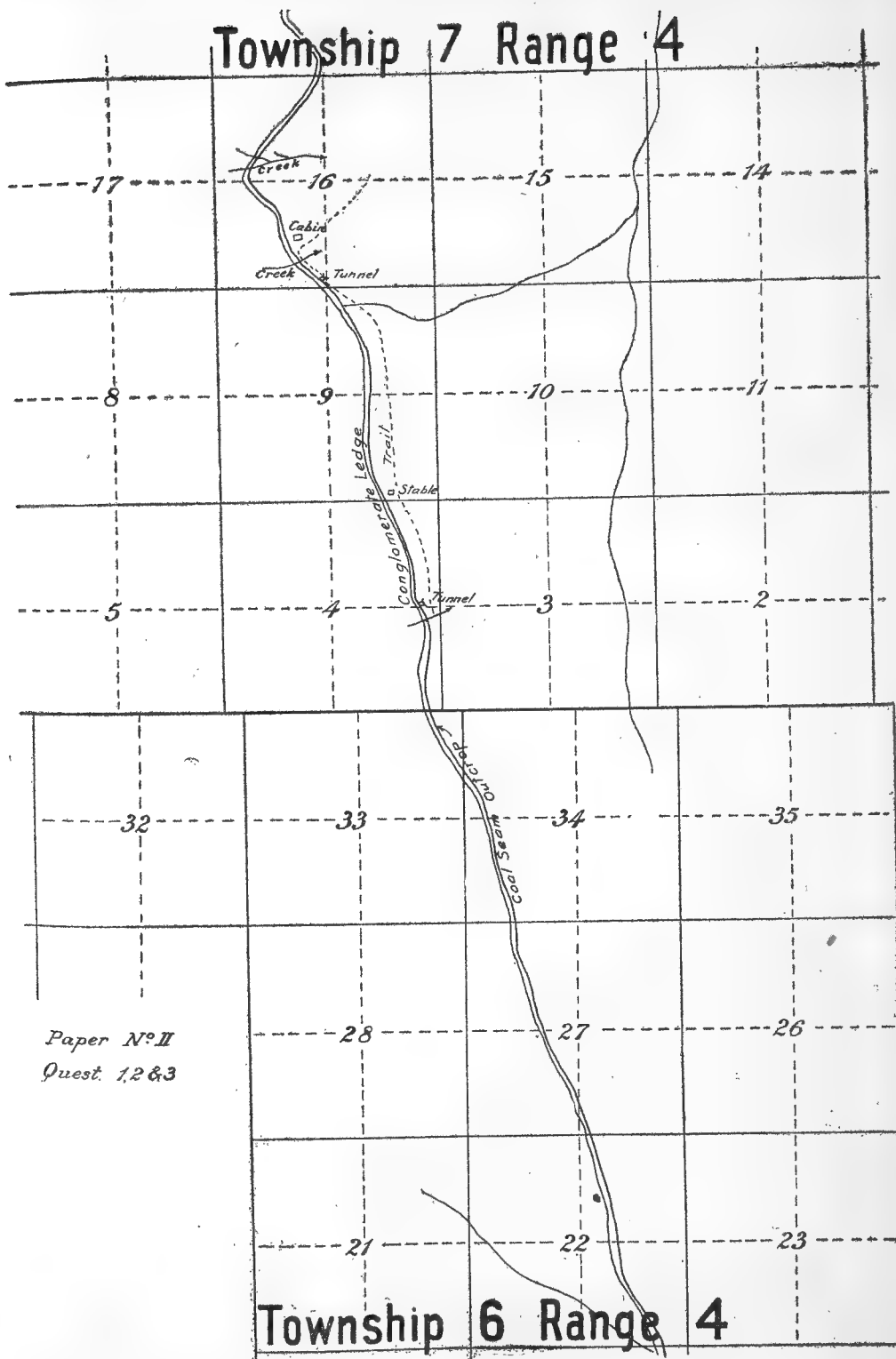
6. Write a surveyor's description of the rectangular lot as shown.

18



7. In working the room and pillar system of mining, where the coal is weighed on the mine scales, describe some method of finding the percentage of waste in the extraction of the coal. 27
8. Explain fully the advantages of a transit over a compass when making a mine survey. 27
9. Oral examinations. 20

Township 7 Range 4



LIST OF NAMES OF HOLDERS OF FIRST CLASS CERTIFICATES.

NAME	ADDRESS	CERT. NO.	DATE ISSUED
FIRST CLASS.			
Addie, W.	Lundbreck	19	25- 8-02
Aspinall, Francis	Calgary	22	1- 3-09
Ashburner, Edward	Lethbridge	40	9-12-10
Alderson, Fred Dunn	Hosmer, B. C.	52	27- 9-11
			Deceased
Allen, Peter	Wayne	72	5-11-12
Bradshaw, G. B.	Nanaimo	61	16- 5-05
Broome, G. H.	New Zealand	46	28-11-04
Rastian, I.	Taber	43	19- 7-04
			Deceased
Brown, J.	Banff	18	24- 8-03
Baxter, Andrew W.	Pig Valley	47	22-12-10
Barnes, Arthur W.	Montana	74	7-11-12
Black, Ernest D.	Coalhurst	84	29- 7-13
Brydon, Andrew D.	Canmore	4	18- 9-14
Colville, A.		52	19- 1-05
			Deceased
Collins, W. F.	Blairmore	24	31-10-03
Coulthard, R. W.	Blairmore	8	19- 2-05
Church, J. A. H.	Frank	11	23- 1-08
Cunningham, G. F.	Edmonton	7	10- 1-08
			Deceased
Crowder, J.	Coleman	38	24-12-09
Christianson, Peter	Edmonton	48	21-12-10
Clyne, James	Canmore	69	18- 3-12
Crowder, Harry	Edmonton	5	18- 9-14
Callander, Ira C.	Pocahontas	13	12- 8-16
Drinnan, Robert G.	Hillcrest	29	30- 1-04
Dickson, G. H.	Coleman	3	31- 5-06
Dunn, A. C.	Edmonton	18	13- 1-09
Darbyshire, J.	Mountain Park	35	3-12-09
Davidson, W. A.	Calgary	25	27-11-09
Davis, David	Coleman	62	28-11-11
Duggan, William H.	Edmonton	85	29- 7-13
De Hart, Joseph B.	Coalhurst	86	29- 7-13
Dennis, Fred W.	Brooks	12	28-10-15
Davidson, David	Bellevue	15	12- 8-16
Emmerson, J.	Frank	50	13- 4-05
Emmerson, C.	Bellevue	49	9- 1-05
Elliott, D.	Blairmore	20	13-10-03
Evans, D.	Michel, B. C.	1	15-10-98
Ellis, W.	Nanton	15	8- 1-09
Flint, W. G.	Canmore	56	13- 4-05
Finlayson, J.	Trochu	30	10- 2-04
Fraser, N.	Edmonton	1	21-12-05
Fraser, G. L.	Coleman	1	31- 5-06
Green, R.	Blairmore	58	26- 4-05
Graham, C.	Nanaimo	7	27- 2-06
Givin, Homer, H.	Royal View	57	23-11-11
Gray, David	Wayne	65	4-12-11
Guernsey, Forbes W.	Bankhead	80	18-12-12

LIST OF NAMES OF HOLDERS OF FIRST CLASS CERTIFICATES.—Continued.

NAME	ADDRESS	CERT. NO.	DATE ISSUED
Henrietta, Chas. M.	Byseville, Ohio	26	24-11-03
Heathcote, Elijah	Coal Creek	23	31-10-03 Deceased
Hargreaves, James	Drumheller	9	25- 6-01
Hamilton, W. L.	Passburg	4	2-12-98
Hardie, W. D. L.	Lethbridge	2	15-10-98
Huntrods, E. S. F.	Taber	3	29-12-98
Holden, James	Drumheller	14	7- 1-09
Hamilton, Robert	Redcliff	4	3- 1-07
Horne, Thomas	Castor	6	26-12-07
Harrison, Stephen	Lethbridge	16	11- 1-09
Hart, John	Edmonton	23	23- 3-09
Horne, Robert	Lethbridge	12	7- 1-09
Howells, Nathaniel	Rosedale	64	4-12-11
Hunter, A. B.	Coleman	14	12- 8-16
Jones, Samuel A.	Lethbridge	57	26- 4-05
John, John	Beaver Lodge	44	29- 4-04
Jones, David	Edmonton	67	27-11-11
Johnson, Moses	Lethbridge	79	14-11-12
Jordan, William	Taber	11	9- 9-15
Keith, Thomas	Nanaimo	20	29- 1-01 Deceased
Kerr, Alex	Tonkin, B. C.	27	18-12-03
Knox, Thomas K.	Coal Creek	28	30-11-09
Kellock, George	Coleman	59	23-11-11
Kinsman, Alex.	Hosmer, B. C.	70	11- 5-12
Little, John	Coalfields	5	2-12-98
Livingstone, Robert	Lethbridge	16	
Lewellyn, D. R.	Michel, B.C.	42	2- 7-04
Little, William F.	Canmore	4	29-12-05
Lee, Robert J.	Elcan	56	23-11-11
Leblanc, Emile	Taber	6	18- 9-14
Morris, James J.	Canmore	3	3-11-98
Morris, Cyrus	Frank	12	13- 2-02
Manley, Henry L.	Fernie, B. C.	41	3- 6-04
Morton, T. R.	Michel	63	27- 7-05
			Deceased
Mills, Thomas	Nanaimo	35	2- 5-04
Marsh, John	Taber	6	1- 2-06
Moore, Samuel M.	Bankhead	26	27-11-09
Maxwell, William	Fincher Creek	27	29-11-09
Miller, Andrew A.	Evansburgh	54	23-11-11
Musgrove, William	Canmore	76	11-11-12
Marshall, John W.	Clover Bar	78	13-11-12
Mather, Thomas	Bickerdike	81	20- 7-13
Milne, Morgan C.	Pocahontas	83	14- 7-13
McEvoy, James	Fernie, B. C.	17	1- 8-03
McVicar, Samuel	Frank	59	26- 4-05
McLean, Donald	Ladysmith, R. C.	62	22- 5-05
McMillan, J. H.	Lethbridge	17	12- 1-09
McLenhan, J. A.	Strathcona	39	13- 1-10
McDonald, John B.	Frank	29	30-11-09
Macauley, D. A.	Drumheller	42	9-12-10

LIST OF NAMES OF HOLDERS OF FIRST CLASS CERTIFICATES.—*Continued.*

NAME	ADDRESS	CERT. NO.	DATE ISSUED
McCulloch, James	Drumheller	41	17-12-10
McDonald, Duncan	Calgary	60	23-11-11
McKelvie, James	Hillcrest	7	26-10-14
Macauley, Angus G.	Coleman	9	16- 8-15
O'Donnell, Thomas	Rosedale	61	28-11-11
Pearson, Robinson	Fernie	11	19-11-01
Parker, John L.	Coalspur	25	13-11-03
Pearson, R. N.	Frank	38	10- 5-04
Powell, John W.	Coleman	60	10- 5-05
Pitcher, Norman C.	Edmonton	75	11-11-12
Pickles, William	Cardiff	77	11-11-12
Quigley, James S.	Hillcrest	21	1- 2-09
Reynolds, E. E.	Lethbridge	33	5- 4-04
Richards, J. A.	Edmonton	39	17- 5-04
Russell, Thomas	Michel, B. C.	45	28-10-04
Raisbeck, Luke	Grassy Lake	47	28-11-04
Reed, Thomas	Nanaimo	5	
Robertson, John	Drumheller	2	22-12-05
Robertson, John	Lundbreck	9	18- 1-08
Richards, C. C.	Bankhead	36	13-12-09
Russell, John	Clover Bar	44	22-12-10
Reid, John C.	Oklahoma	53	4-12-11
Roberts, Edward I.	Strathcona	55	18-11-11
Reid, Adam H.	Commerce	3	18- 9-14
Russell, James	Lethbridge	8	8-12-14
Robert, Louis P.	Blairmore	10	16- 8-15
Smith, Frank B.	Edmonton	7	4- 6-01
Stockett, Thomas R.	Nanaimo	10	19-11-01
Simister, Chas.	Fernie	21	13-10-03
Strachan, Robert	Fernie	31	10- 2-04
Shepherd, F. H.	Victoria	34	2- 5-04
Symons, C. C.	Lethbridge	37	2- 5-04
Stockett, Lewis	Calgary	51	19- 1-05
Sharp, Alex	Rossland, B. C.	53	22- 2-05
Stirling, John T.	Edmonton	8	10- 1-08
Scott, Alex	Strathcona	5	26-12-07
Sparrow, Edwin	Lundbreck	13	7- 1-09
Scott, A. N.	Edmonton	19	25- 1-09
Shone, Samuel	Coleman	33	2-12-09
			Deceased
Stevens, Leonard C.	Edmonton	31	2-12-09
Saville, Enoch O.	Taber	45	22-12-10
Shaw, William	Blairmore	46	22-12-10
Stewart, Robert T.	Hillcrest	50	12- 1-11
Shanks, John	Nordegg	51	17- 1-11
Stevenson, John	Lethbridge	68	6-12-11
Stevenson, William	Pinto, Sask	87	29- 7-13
Shanks, David	Nordegg	16	4-11-16
Thorne, Benj. L.	Calgary	32	2-12-09
Thain, Harry S.	Lethbridge	34	2-12-09
Thomas, John I.	Edmonton	49	16- 1-11
Thomas, Willis P.	Diamond City	58	23-11-11

LIST OF NAMES OF HOLDERS OF FIRST CLASS CERTIFICATES.—*Continued.*

NAME	ADDRESS	CERT. NO.	DATE ISSUED
Thomas, Joseph D.	Passburg	66	4-12-11
Whiteside, O. E. S.	Coleman	6	15-12-98
White, E. Proctor	Lethbridge	8	17- 6-01
Wylie, John B.	Frank	13	25-11-02
			Deceased
Waite, Archibald	Taber	15	9- 4-03
Wilson, David G.	Hosmer	22	31-10-03
Wilson, Arthur R.	Lethbridge	28	12- 1-04
Wall, Wm. H.	Nanaimo	32	10- 2-04
Williams, W. P.	Blairmore	36	2- 5-04
Wright, H. B.	Fernie	40	25- 5-04
Wilkinson, George	Nanaimo	54	27- 3-05
Weatherby, C.	Entrance	2	31- 5-06
Williams, T. H.	Taber	10	18- 1-08
Watters, John	Bankhead	30	30-11-09
Wark, S. D.	Passburg	37	15-12-09
Willey, Edward	Fernie, B. C.	71	1-11-12
Watson, William	Coleman	73	7-11-12
Welch, James D.	Nordegg	1	18- 9-14
Williams, Thomas B.	Canmore	2	18- 9-14

LIST OF NAMES OF HOLDERS OF SECOND CLASS CERTIFICATES.

NAME	ADDRESS	CERT. NO.	DATE ISSUED
SECOND CLASS.			
Anderson, J.	Bellevue	2	30- 5-06
Aspinall, F.	Calgary	27	27- 5-08
Allen, Peter	Wayne	72	20-12-11
Allen, William C.	Edmonton	22	7- 9-15
Bastian, T. W.	Bankhead	27	8- 4-05
Bastian, J.	Taber	21	7- 5-04
			Deceased
Bowie, J.	Frank	4	3- 1-07
Bamling, J.	Diamond City	44	2-12-09
Brockhouse, I. B.	Milk River	74	20-12-11
Bridge, Edward	Drumheller	99	5-11-12
Brown, Alan James	Pocahontas	105	7-11-12
Barclay, Andrew	Frank	111	18-11-12
Brown, William	Commerce	126	31- 7-13
Blake, Henry	Bellevue	128	31- 7-13
Brisco, Daniel	Hillcrest	19	21- 8-15
Bilson, George H.	Beverly P. O.	2	27- 8-14
Brownrigg, John H.	Bankhead	21	30- 8-15
Berford, Edward	Blairmore	27	12- 8-16
	Commerce	30	18- 4-05
Chesnut, C.	Michel	13	
Corkill, T.	Drumheller	10	26-12-07
Crowder, James	Oxville	28	7- 1-09
Clay, E.	Blairmore	49	22-12-09
Clark, J. C.			

LIST OF NAMES OF HOLDERS OF SECOND CLASS CERTIFICATES—*Continued*

NAME	ADDRESS	CERT. NO.	DATE ISSUED
Clyne, J.	Canmore	53	22- 4-10
Clemenson, John	Bankhead	58	17-12-10
Cooke, Joseph	Burmis	66	20- 2-11
Crowder, Harry	Mountain Park	69	18-12-11
Coupland, George	Bellevue	77	21-12-11
Cranston, Michael	Pocahontas	119	29- 7-13
Crawford, Alexander	Pocahontas	125	31- 7-13
Campbell, Kenneth S.	Blairmore	132	31- 7-13
Coupland, Edward	Bellevue	8	18- 9-14
Coutes, George	Lethbridge	20	26- 8-15
Conlin, John	Drumheller	33	22- 8-16
Davies, D.	Coleman	31	18- 4-05
Duggan, R. G.	Taber	19	26- 4-04
Davis, A.	Lethbridge	4	19-11-98
Dixon, S.	Lille	24	8- 2-08
Davies, S.	Coal Creek	18	10- 1-08
Davies, John	Coleman	11	26-12-07
Dunn, J. P.	Strathcona	9	26-12-07
Davis, John	Lethbridge	31	11- 1-09
Davies, T.	Frank	54	22- 4-10
Davidson, David	Blairmore	94	1-11-12
Davies, Thomas Owen	Pocahontas	104	7-11-12
Dalziel, Robert	Clover Bar	122	31- 7-13
Digman, John H.	Coalhurst	134	31- 7-13
Dennis, F. W.	Lethbridge	3	27- 8-14
Dewar, Alexander	Coleman	16	16- 8-15
Donaldson, C. S.	Lethbridge	35	25- 8-16
Emmerson, C.	Bellevue	3	15-11-98
Eccleston, W.	Michel	16	10- 1-08
Evans, T. R.	Coleman	137	31- 7-13
Fraser, G. L.	Coleman	25	23-12-04
Flint, W. G.	Canmore	16	
Francis, J.	Taber	29	8- 1-09
Fox, A.	Taber	42	29-11-09
Foster, W. R.	Michel	51	24- 1-10
Fulton, James K.	Coleman	133	31- 7-13
Foster, William	Pocahontas	14	16- 8-15
Finlay, Samuel	Clover Bar	25	12- 8-16
Ferguson, C. J.	Mountain Park	38	30- 8-16
Green, R.	Blairmore	17	26- 4-04
Giffen, H. R.	Lethbridge	14	
Gilliland, William	Cardiff	61	17-12-10
Garbett, Richard	Corbin, B. C.	100	5-11-12
Garrett, John	Blairmore	123	31- 7-13
Hall, Oliver	Bellevue	26	23-12-04
Harvie, Robert	Lethbridge	1	30- 5-06
Hutchinson, A. M.	Coleman	6	3- 1-07
Horne, Robert	Coleman	12	26-12-07
Horswell, John	Cardiff	34	1- 2-09
Howell, Nathaniel	Rosedale	55	25- 5-10
Hallworth, Albert	Bellevue	65	30- 1-11
Hamilton, Allan	Bellevue	78	21-12-11
Heeley, William G.	Edmonton	80	22-12-11

LIST OF NAMES OF HOLDERS OF SECOND CLASS CERTIFICATES—*Continued*

NAME	ADDRESS	CERT. NO.	DATE ISSUED
Hill, James	Lethbridge	84	13- 1-12
Hutton, John	Bellevue	93	1-11-12
Hunter, Henry	Edmonton	102	7-11-12
Hughes, Daniel J.	Diamond City	110	13-11-12
Hartley, William	Bankhead	114	25-11-12
Hunter, Charles	Beverly	4	18- 9-14
Hunter, Alex. B.	Coleman	7	18- 9-14
Harries, Henry C.	Coleman	9	18- 9-14
Heathcote, Joseph	Edmonton	10	18- 9-14
Hughes, William R.	Calgary	13	6- 8-15
Halliday, George W.	Delia	31	22- 8-16
Jones, Samuel A.	Lethbridge	18	26- 4-04
Johnson, Moses	Taber	46	3-12-09
Jones, David	Strathcona	48	15-12-09
Jones, Peter	Commerce	92	1-11-12
Jordan, William	Taber	112	20-11-12
James, William	Pocahontas	5	19- 9-14
Kerr, John	Lethbridge	33	6- 7-05
Kellock, George	Coleman	39	27-11-09
Kellock, James	Coleman	82	30-12-11
Keith, John D.	Coalhurst	107	11-11-12
Kaye, Herschel	Pocahontas	129	31- 7-13
Lowrie, Ralph	Frank	34	6- 7-05
Livingstone, Robert	Lethbridge	6	5- 6-99
Livingstone, John C.	Lethbridge	5	19-11-98
Lee, Robert John	Grassy Lake	56	17-12-10
Luck, George	Bellevue	70	19-12-11
letcher, William M.	Bankhead	96	1-11-12
Leblanc, Emile	Taber	127	31- 7-13
Littler, Robert	Bankhead	6	18- 9-14
Musgrove, John	Canmore	2	15-11-98
Musgrove, William	Canmore	32	6- 7-05
Miller, John K.	Drumheller	29	8- 4-05
Morris, John	Lundbreck	8	3- 1-07
Morgan, Daniel	Edmonton	17	Deceased 10- 1-08
Moore, Thomas E.	Eyremore	47	11-12-09
Miard, Harry E.	Coal Creek	64	16- 1-11
Munro, William K.	Blairmore	76	21-12-11
Murphy, Peter J.	Clover Bar	91	24- 8-12
Mather, Thomas	Drumheller	106	11-11-12
Muir, David	Pincher Creek	108	11-11-12
Massey, Harry	Corbin, B. C.	116	25-11-12
Morgan, Owen	Bellevue	121	29- 7-13
Mason, Samuel	Blairmore	130	31- 7-13
Mather, John	Coalspur	23	13- 9-15
Miller, Walter	Bellevue	26	12- 8-16
Melling, Peter	Coalhurst	28	12- 8-16
McVicar, Samuel	Frank	23	23-12-04
McKean, John W.	Lethbridge	24	23-12-04
McGregor, Alex	Frank	1	20-12-05
McKay, Donald	Bankhead	3	30- 5-06
McLenhan, John A.	Dinant	33	1- 2-09

LIST OF NAMES OF HOLDERS OF SECOND CLASS CERTIFICATES—*Continued*

NAME	ADDRESS	CERT. NO.	DATE ISSUED
McKelvie, James	Hillcrest	43	29-11-09
McDonald, Duncan	Calgary	60	17-12-10
McMillan, Donald	Pincher Creek	71	20-12-11
McDonald, James A.	Bellevue	79	21-12-11
MacKay, Angus	St. Albert	81	26-12-11
McIntyre, John J.	Calgary	88	2- 3-12
McDonald, James O. C.	Coleman	15	16- 8-15
McDonald, Hector S.	Bellevue	17	16- 8-15
McDonald, Noble M.	Bellevue	18	16- 8-15
McLellan, John A.	Wabamun	24	2-11-15
McFegan, William	Hillcrest	34	22- 8-16
Nicol, James	Frank	36	10- 2-09
Nanson, Thomas H.	Bellevue	40	25- 9-16
Osthelidt, Gus	Bankhead	1	14-11-98
Cliphant, Joseph H.	Bellevue	59	17-12-10
Phillips, Charles	Frank	20	26- 4-04
Pearson, W. G.	Frank	15	26- 4-04
Parsons, T. Lloyd	Edmonton	26	21- 3-08
Pickles, William	Edmonton	35	1- 2-09
Prentice, John	Lille	45	2-12-09
Park, Stewart Gray	Lethbridge	57	17-12-10
Parker, Levi	Bellevue	68	28- 4-11
Powell, Albert Edward	Strathcona	85	16- 1-12
Parry, Thomas	Coleman	109	12-11-12
Picton, Daniel	Passburg	118	10- 2-13
Penman, John Smith	Rosenroll	120	29- 7-13
Pavier, Evan	Coleman	37	30- 8-16
Quigley, Daniel Hugh	Lethbridge	73	20-12-11
Queen, Andrew Mitchell	Lethbridge	124	31- 7-13
Rice, Awrey	Frank	2	20-12-05
Roberts, D. E.	Coleman	14	10- 1-08
Rankin, George	Michel, B. C.	41	29-11-09
Roberts, E. I.	Strathcona	52	12- 3-10
Ramsey, Peter Millar	Lethbridge	86	24- 2-12
Roberts, Ebenezer	Bellevue	87	2- 3-12
Richards, Samuel	Corbin, B. C.	98	5-11-12
Roberts, John	Bellevue	12	26-10-14
Russell, John	Wayne	29	12- 8-16
Robinson, William	Drumheller	30	22- 8-16
Rawlinson, R.	Edmonton, South	32	22- 8-16
Scott, Hugh	Lethbridge	7	9- 3-00
Steele, Thomas	Coleman	12	26- 4-04
Sequin, Joseph A.	Estevan, Sask.	22	16- 4-04
Sparrow, Edward	Lundbreck	7	3- 1-07
Shone, Samuel	Coleman	23	23- 1-08
Shaw, William	Canmore	21	18- 1-08
Scott, Andrew N.	Edmonton	19	10- 1-08
Stewart, J. M.	Fernie, B. C.	50	24-12-09
Sihvon, William	Bellevue	40	29-11-09
Sloan, Thomas W.	Burmis	67	2- 3-11
Shaw, Thomas John	Canmore	75	21-12-11
Strickland, Thomas	Clover Bar	101	5-11-12
Schmidt, Otto Prentiss	Camrose	115	25-11-12

LIST OF NAMES OF HOLDERS OF SECOND CLASS CERTIFICATES—*Continued*

NAME	ADDRESS	CERT. NO.	DATE ISSUED
Scott, Alexander	Pocahontas	103	7-11-12
Shanks, David	Coal Creek, B. C. ...	117	7-12-12
Stephenson, Joseph	Bellevue	135	31- 7-13
Stephenson, Thomas	Bellevue	136	31- 7-13
Smith, Thomas Edwin	Yetwood	39	14- 9-16
Thomas, David	Bankhead	28	8- 4-05
			Deceased
Teppo, Herman	Bellevue	15	10- 1-08
			Deceased
Thomas, John	Diamond City	20	8- 1-09
Thain, Harry S.	Lethbridge	32	12- 1-09
Thomas, Joseph D.	Hosmer, B. C.	37	25-11-09
Taylor, Tom	Hillcrest	62	22-12-11
Taylor, George Warren ...	Lethbridge	83	30-12-11
Thomas, John	Frank	89	25- 3-12
Tonge, Thomas	Bickerdike	90	1- 6-12
Thompson, Joseph	Coleman	97	1-11-12
Thomas, Isaac	Coleman	131	31- 7-13
Unsworth, Robert	Garden Plain	36	30- 8-16
Williams, Thomas H.	Canmore	8	20- 7-00
Waite, Archibald	Taber	10	26- 4-04
Wetherbee, Cory	Hillcrest	11	6-11-02
Wilson, William George ...	Coleman	3	20-12-05
Whitelaw, Thomas	Coleman	25	24- 2-08
Watters, John	Bankhead	22	18- 1-08
Watkins, W. E.	Lille	20	18- 1-08
Watson, William	Coleman	13	26-12-07
Wright, J. S.	Canmore	38	27-11-09
Winter, Archibald	Strathcona	63	16- 1-11
Watters, Alexander Grant..	Pocahontas	95	1-11-12
Welch, James Douglas	Taber	113	20-11-12
Williams, John Jenkyn	Lovett	11	18- 9-14

LIST OF NAMES OF HOLDERS OF THIRD CLASS CERTIFICATES.

NAME	ADDRESS	CERT. NO.	DATE ISSUED
THIRD CLASS.			
Anderson, J.	Frank	13	
Alderson, R. D.	Coleman	17	3- 1-07
Aspinall, F.	Bellevue	32	30- 5-07
Ashurst, W.	Coleman	82	26- 8-09
Adlam, Wm.	Hillcrest	108	2- 6-10
Archer, Roland	Hillcrest	132	22-12-10
Allen, William Charles	Coleman	205	10- 8-12
Archibald, David	Bickerdike	222	25-11-12
Allan, Alexander McD.	Hosmer, B. C.	247	31- 7-13
Adams, Thomas Henry	Coalhurst	16	10- 3-14
Anderson, Andrew	Bellevue	39	17- 6-14
Atherton, Edward	Bickerdike	40	14- 7-14

LIST OF NAMES OF HOLDERS OF THIRD CLASS CERTIFICATES.—*Continued.*

NAME	ADDRESS	CERT. NO.	DATE ISSUED
Appleton, John Thomas	Mountain Park	76	19- 4-15
Ashton, William	Mountain Park	90	27- 8-15
Bastian, T. W.	Bankhead	30	5-12-04
Bansemmer, R.	Bankhead	14	3- 1-07
Barber, J.	Frank	7	3- 1-07
Burrows, C.	Frank	40	18- 1-08
Brownrigg, J. H.	Frank	35	26-12-07
Brown, T.	Bankhead	24	14- 5-07
Blake, P.	Lundbreck	23	14- 5-07
Bovey, A. C.	Edmonton	64	1- 2-09
Boulton, W. E.	Bankhead	48	29- 5-08
Barnes, B. J.	Coal Creek, B. C.	92	29-11-09
Besso, A.	Canmore	80	26- 7-09
Briscoe, Daniel	Hillcrest	117	9- 6-10
Blake, Henry	Bellevue	133	30-12-10
Bradley, Thomas	Hillcrest	138	16- 1-11
Barber, James S.	Hillcrest	144	3- 7-11
Bovio, Michael	Bellevue	146	3- 7-11
Brown, Alan James	Cardiff	163	17-11-11
Berford, Edward	Elcan	196	13- 7-12
Blakemore, Roydon Ellers ..	Edmonton	227	16-12-12
Bainbridge, James	Pocahontas	235	31- 7-13
Baird, John	Blairmore	243	31- 7-13
Beal, George F.	Bellevue	7	30-12-13
Brearley, Garnet	Lethbridge	18	16- 3-14
Barclay, William	Bankhead	22	13- 3-14
Brown, John Francis	Pocahontas	29	21- 4-14
Barclay, William Greig	Pocahontas	30	23- 4-14
Byers, John Walter	Taber	48	25-11-14
Byron, John	Coalhurst	11	10- 3-14
Billington, Edward Eric	Coleman	73	25- 2-15
Booth, George	Edmonton	85	18- 8-15
Boldon, James	Bellevue	86	19- 8-15
Bell, William	Coleman	95	12-10-15
Brown, Robert	Bellevue	112	10- 7-16
Bateman, Fred	Sheerness	123	14- 7-16
Barnes, Edward	Mountain Park	137	25- 9-16
Cawthorne, L.	Frank	46	18- 4-05
Churchill, J.	Frank	45	18- 4-05
Chestnut, C.	Blairmore	28	26- 4-04
Cowan, W.	Bankhead	4	15-11-98
Catchpole, C.	Three Hills	2	30- 5-06
Cooke, J.	Bankhead	4	30- 5-06
Clark, J. C.	Blairmore	33	18- 7-07
Cole, J. J.	Bankhead	66	1- 2-09
Clyne, J.	Canmore	65	1- 2-09
Campbell, Kenneth S.	Edmonton	102	27- 1-10
Clemenson, John	Bankhead	105	30- 5-10
Carson, James	Frank	120	21- 6-10
Crockett, Levi A.	Hillcrest	131	22-12-10
Coupland, George	Bellevue	148	4- 7-11
Carson, George	Frank	154	8- 7-11
Crawford, George	Frank	160	17-11-11
Coombs, Walter Percy	Taber	164	17-11-11
Coupland, Edward	Lundbreck	173	17-11-11

LIST OF NAMES OF HOLDERS OF THIRD CLASS CERTIFICATES.—*Continued.*

NAME	ADDRESS	CERT. NO.	DATE ISSUED
Charlton, Samuel	Hillcrest	179	23-11-11 Deceased
Cox, John	Coleman	193	13- 7-12
Crawford, John	Beaver Mines	197	13- 7-12
Coutts, George	Lethbridge	210	26-10-12
Clark, Robert	Lethbridge	212	31-10-12
Cranston, Michael	Clover Bar	218	11-11-12
Crawford, William	Lethbridge	8	6- 3-14
Coutts, David	Hardieville	23	30- 3-14
Crabb, Sam Alex Bucklanu ..	Lethbridge	38	28- 5-14
Chaplow, Joseph	Lethbridge	49	25-11-14
Clarke, Robert Gordon	Drumheller	70	16- 2-15
Campbell, John Hugh	Canmore	71	16- 2-15
Callander, Ira C.	Pocahontas	78	19- 8-15
Coxon, Thomas	Edmonton	89	27- 8-15
Convery, Denis	Coleman	107	10- 7-16
Davies, T.	Frank	49	18- 4-05
Duggan, R. G.	Taber	27	26- 4-04
Downs, T.	Canmore	24	25-11-03
Davies, W. J.	(Deceased)	16	25-11-03
Dixon, S.	Lille	18	3- 1-07
Devonshire, G.	Canmore	31	23- 5-07
Duggan, E. J.	Taber	41	18- 1-08
Davies, Thomas Owen	Coleman	109	2- 6-10
Davidson, David	Edmonton	170	17-11-11
Doodson, Robert	Coal Creek, B. C.	177	17-11-11
Duthie, Alexander Ferris ..	Pocahontas	184	28-11-11
Digman, John H.	Royal View	198	13- 7-12
Duncan, Ninian Selkirk	Cochrane	211	31-10-12
Draper, Robert	Cochrane	214	1-11-12
Denis, Frederick William ..	Lethbridge	3	28-11-13
D'Altroy, Arthur Charles ...	Commerce	6	1-12-13
Dean, William	Bankhead	20	20- 3-14
Duggan, John	Edmonton	97	12-10-15
Douglas, D. B.	Edmonton	129	26- 7-16
Eccleston, W.	Michel, B. C.	20	3- 1-07
Evans, H.	Taber	94	2-12-09
Evans, D.	Frank	83	3- 9-09
Evans, Hugh	Lethbridge	156	12- 7-11
Embree, Morton Byers	Bankhead	239	31- 7-13
Evans, Nathaniel	Passburg	54	27-11-14
Fairhurst, H.	Lethbridge	39	23-12-04
Ferguson, C. J.	Canmore	4	20-12-05
Fraser, J.	Coleman	8	3- 1-07
Fox, A.	Taber	55	8- 1-09
Fowers, C. W.	Canmore	50	29- 5-08
Fiske, G. E.	Edmonton	88	27-11-09
Fisher, Samuel	Passburg	169	17-11-11
Ford, Allen	Burmis	183	28-11-11
Foster, William	Pocahontas	31	28- 4-14
Ferguson, John	Commerce	34	23- 5-14
Fyfe, Walter H.	Lethbridge	79	19- 8-15
Fishwick, Thomas	Mountain Park	98	12-10-15
Giffen, H. R.	Coalfields	19	26- 4-04
Gates, H.	Coleman	26	26- 4-04

LIST OF NAMES OF HOLDERS OF THIRD CLASS CERTIFICATES.—*Continued.*

NAME	ADDRESS	CERT. NO.	DATE ISSUED
Griffiths, E. H.	Canmore	33	5-12-04
Gladwin, J.	Edmonton	97	20-12-09
Griffiths, T. J.	Lille	77	18- 6-09
Gillespie, John Maclare	Coleman	111	2- 6-10
Gilliland, William	Strathcona	123	8-11-10
Gwilliam, David J. M.	Hillcrest	130	22-12-10
Gregory, John B.	Passburg	128	17-12-10
Garrett, John	Lille	147	4- 7-11
Griffiths, John Thomas	Lille	168	17-11-11
Garbett, Richard	Michel, B. C.	180	23-11-11
Gorton, James	Hillcrest	203	22- 7-12
Green, Henry Victor	Halkirk	1	1-11-13
Grant, Robert H.	Camrose	2	23-10-13
Grant, Robert	Lethbridge	10	10- 3-14
Goldie, William	Lethbridge	24	1- 4-14
Graham, Robert	Clover Bar	50	27-11-14
Gilday, Michael Edward	Drumheller	63	11-12-14
Gillespie, John C.	Drumheller	132	3- 8-16
Holmes, G. E.	Fernie, B. C.	15	1903
Hood, Andrew	Frank	20	26- 4-04
Hadfield, John	Canmore	23	21- 6-03
Harrison, Thomas	Bankhead	29	11- 7-04
Haines, Thomas	Coleman	37	23-12-04
Harvie, Robert	Lethbridge	40	23-12-04
Hallworth, Albert	Bellevue	52	12- 6-08
Hayes, Robert	Lundbreck	60	22- 1-09
Harvie, John	Taber	68	1- 2-09
Henderson, W.	Minott	61	26- 1-09
Higgins, Alfred	Bankhead	25	15- 5-07
Hannen, James	Canmore	1	30- 5-06
Holden, James	Bankhead	13	3- 1-07
Humble, Stephen T.	Bellevue	29	23- 5-07
Hamilton, Charles	Edmonton	36	10- 1-08
Hilling, James	Coleman	43	23- 1-08
Hutton, Isaac	Bellevue	99	27-12-09
Hartley, William	Bankhead	110	2- 6-10
Hill, James	Royal View	114	3- 6-10
Hulme, Charles	Hillcrest	124	17-12-10
Henderson, James	Reid Hill	134	30-12-10
Hutton, John	Bellevue	135	30-12-10
Henderson, Samuel	Reid Hill	136	30-12-10
Halliday, George	Champion	155	8- 7-11
Hughes, William Robert ...	Lille	181	23-11-11
Hutton, George	Bellevue	186	2-12-11
Hutchison, Peter	Frank	202	22- 7-12
Heap, Robert	Lundbreck	206	10- 8-12
Hunter, Alexander Brunton	Coleman	207	19- 8-12
Harries, Henry Cecil	Coleman	209	26-10-12
Hutton, David Telfer	Bellevue	241	31- 7-13
Heathcote, Joseph	Edmonton	32	28- 4-14
Harmison, William	Mountain Park	41	27- 8-14
Hynd, William	Elcan	52	27-11-14
Hutton, Hugh	Bellevue	60	5-12-14
Hargreaves, George	Lethbridge	65	11-12-14
Hopkins, William	Coleman	93	1- 9-15
Huddart, Matthew	Bellevue	102	18-11-15
Hamilton, John	Lethbridge	120	10- 7-16
Howells, John	Duncan	126	19- 7-16

LIST OF NAMES OF HOLDERS OF THIRD CLASS CERTIFICATES.—*Continued.*

NAME	ADDRESS	CERT. NO.	DATE ISSUED
Hyde, Isaac	Drumheller	134	15- 9-16
Holmes, Robert	Coleman	141	11-11-16
Ironmonger, John	Hillcrest	145	3- 7-11
Jones, Evan	Coalfields	12	26- 4-04
James, Joseph	Frank	25	26- 4-04
Jones, Samuel A.	Lethbridge	17	26- 4-04
Jones, Erskine	Coalfields	47	18- 4-05
James, Henry	Coleman	53	14- 7-08
Jones, David	Edmonton	69	1- 2-09
Jones, Jack	Cardiff	127	17-12-10
Jones, Peter	Lethbridge	195	13- 7-12
Jordan, William	Taber	220	20-11-12
Joyce, Michael	Bickerdike	224	25-11-12
James, William	Pocahontas	234	31- 7-13
Jackson, John	Bellevue	246	31- 7-13
James, John	Pocahontas	28	21- 4-14
Jones, David	Taber	55	27-11-14
Johnson, Albert	Coleman	88	26- 8-15
Jones, Daniel H.	Lovettville	99	10-12-15
Kerr, William R.	Coleman	89	29-11-09
Kirkeberg, Henry S.	Michel, B. C.	87	27-11-09
Kerr, Robert T.	Passburg	75	17- 6-09
Kerr, Robert	Lundbreck	76	17- 6-09
Kaye, Herschel	Maycroft	191	4- 1-12
Kemp, David	Beaver Mines	201	22- 7-12
Kenyon, William	Mountain Park	44	28- 9-14
Knox, Joseph	Hardieville	119	10- 7-16
Livingstone, Robert	Lethbridge	7	21-11-98
Livingstone, James C.	Lethbridge	18	26- 4-04
Learmonth, A. J.	Lundbreck	42	23- 1-08
Love, William	Edmonton	86	27-11-09
Lamont, David	Frank	98	24-12-09
Letcher, John J.	Hillcrest	149	4- 7-11
Leblanc, Emile	Coleman	153	8- 7-11
Littler, Robert	Michel, B. C.	166	17-11-11
Loxton, George	Fernie, B. C.	176	17-11-11
Littler, John	Bankhead	190	30-12-11
Littler, Matthew	Michel, B. C.	226	7-12-12
Laight, Jonas	Medicine Hat	233	3- 5-13
Ludbrook, Ellis Edw.	Bickerdike	237	31- 7-13
Lynch, Stewart	Canmore	26	15- 4-14
Loxton, John	Fernie, B. C.	51	27-11-14
Letcher, Joseph H.	Lovettville	100	12-10-15
Lamond, David	Frank	109	10- 7-16
Loftus, Edward	Drumheller	111	10- 7-16
Lewis, Thomas	Hardieville	131	26- 7-16
Musgrove, Wm.	Canmore	9	23- 8-00
Mattson, Matt	Frank	34	5-12-04
Morris, David	Edmonton	45	24- 2-08
Machin, J. C.	Strathcona	46	26- 2-08
Moore, Thomas E.	Eyremore	56	11- 1-09
Mather, Thos.	Taber	96	8-12-09
Morgan, Owen	Coleman	143	3- 7-11
Munro, William K.	Lille	150	4- 7-11

LIST OF NAMES OF HOLDERS OF THIRD CLASS CERTIFICATES.—*Continued.*

NAME	ADDRESS	CERT. NO.	DATE ISSUED
Muir, David	Lundbreck	151	8- 7-11
Miller, Walter	Bellevue	159	25- 8-11
Moore, James H.	Coleman	167	17-11-11
Massey, Harry	Michel, B. C.	172	17-11-11
Murray, John	Lille	174	17-11-11
Mason, Samuel	Taber	187	6-12-11
Morrison, Malcolm	Coleman	189	30-12-11
Melling, Peter	Coalhurst	208	26-10-12
Mackie, John	Corbin, B. C.	221	25-11-12
Makin, John William	Coleman	240	31- 7-13
Muir, Alexander	Hardieville	12	10- 3-14
Miller, Joseph	Stafford Village	14	10- 4-14
Muir, Robert	Bankhead	21	23- 3-14
Murray, David	Hillcrest	35	26- 5-14
Mather, John	Bickerdike	45	26-10-14
Muir, James	Bankhead	57	5-12-14
Marsh, Ernest	Taber	61	5-12-14
Morgan, William John	Canmore	64	11-12-14
Martin, William Henry	Drumheller	69	28- 1-15
Marsh, John Henry	Taber	75	20- 3-15
Mallabone, Ernest	Canmore	105	7- 7-16
Miller, David Liddle	Taber	114	10- 7-16
Millar, Peter P.	Drumheller	127	26- 7-16
Martin, Richard	Taber	135	25- 9-16
Maddison, William	Mountain Park	136	25- 9-16
McKay, John James	Lethbridge	5	19-11-98
McKinnon, H. G.	Canmore	36	5-12-04
McGregor, Alex.	Frank	41	16- 1-05
McCulloch, Alex.	Lille	43	18- 4-05
McDonald, J. A.	Blairmore	44	18- 4-05
McVey, William	Frank	39	10- 1-08
McLeary, Stewart	Lethbridge	58	12- 1-09
McMillan, William D.	Lethbridge	72	25- 2-09
McKinnon, A. J.	Canmore	62	29- 1-09
McLenhan, John A.	Strathcona	51	8- 6-08
McGarry, Martin	Michel, B. C.	59	19- 1-09
McDonald, James A.	Lille	91	29-11-09
McMillan, Donald	Coleman	107	31- 5-10
McDonald, Duncan	Canmore	112	2- 6-10
McDonald, Hector	Bankhead	115	3- 6-10
McDonald, William C.	Lethbridge	122	16- 7-12
McDevitt, James J.	Toffield	129	22-12-10
McGladrie, John	Lille	152	8- 7-11
McMullin, Joseph	Hillcrest	171	17-11-11
McGough, Joseph Patrick ..	Bellevue	219	18-11-12
McDonald, James Otis Cove	Coleman	225	25-11-12
McDonald, Noble Moore ...	Bellevue	5	28-11-13
McDowan, James Kerr	Lethbridge	13	10- 3-14
McLeod, John Alexander ..	Edmonton	74	8- 3-15
McLellan, John Angus	Lovett	77	8- 5-15
McIlveen, William	Lovett	80	19- 8-15
McAndrew, Robert	Clover Bar	81	19- 8-15
McAndrew, John	Lovett	83	19- 8-15
McKean, George Jack	Bellevue	121	10- 7-16
McLean, William	Mountain Park	122	10- 7-16
McQueen, Andrew	Nordegg	124	19- 7-16

LIST OF NAMES OF HOLDERS OF THIRD CLASS CERTIFICATES.—*Continued.*

NAME	ADDRESS	CFRT. NO.	DATE ISSUED
Nelson, Horatio	Lundreck	11	3- 1-07
Nanson, Thomas H.	Canmore	15	3- 1-07
Nicol, James	Frank	34	26-12-07
Nicol, George	Pocahontas	27	21- 4-14
Nugent, Bernard	Taber	133	30- 8-16
Oliphant, J. H.	Frank	26	17- 5-07
Oliphant, John	Bellevue	79	16- 7-09
O'Donnell, Thomas	Kipp	139	17- 3-11
Ottewell, William John	Clover Bar	245	31- 7-13
Oakes, Robert	Bankhead	104	10- 6-16
Oakley, John	Mountain Park	115	10- 7-16
Phillips, Charles	Frank	14	30-12-02
			Deceased
Prentice, John	Lille	67	1- 2-09
Powell, Albert E.	Clover Bar	71	4- 2-09
Picton, William	Frank	78	8- 7-09
Pounder, George	Pincher Creek	84	22- 9-09
Parker, Levi	Bellevue	100	18- 1-10
Pickering, Gabe	Taber	104	25- 2-10
Parry, Thomas	Hillcrest	119	21- 6-10
Park, Stewart G.	Lethbridge	121	25- 6-10
Patterson, John	Hillcrest	126	17-12-10
Picton, Daniel	Passburg	178	23-11-11
Park, William	Lethbridge	194	13- 7-12
Parkes, John Thomas	Lethbridge	236	31- 7-13
Park, Alex. C.	Lethbridge	25	8- 4-14
Porteous, Alexander	Hillcrest	36	26- 5-14
Purdy, Stearns J.	Bellevue	37	28- 5-14
Parker, Joseph	Drumheller	47	25-11-14
Puckett, Owen Lovejoy	Lcvett	53	27-11-14
Pavier, Ivan	Coleman	91	27- 8-15
Price, Alfred	Edmonton	103	4- 1-16
Pitt, Arthur John	Coleman	108	10- 7-16
Phillips, David	Commerce	110	10- 7-16
Price, John	Mountain Park	116	10- 7-16
Pratt, Philip	Lovettville	117	10- 7-16
Paterson, Patrick	Evansburgh	139	3-10-16
Quigley, Daniel H.	Lethbridge	157	14- 7-11
Queen, Andrew Mitchell ...	Lethbridge	228	26-12-12
Rice, Awrey	Frank	48	18- 4-04
Rawson, Thomas Samuel ...	Frank	1	20-12-05
Rose, Walter	Lundreck	54	25- 8-08
Roberts, William	Strathcona	95	3-12-09
Robinson, John Herbert ...	Hillcrest	106	31- 5-10
Rowbotham, William Henry.	Royal View	116	6- 6-10
Roberts, Ebenezer	Passburg	118	20- 6-10
Richardson, Alfred	Lethbridge	125	17-12-10
Richards, George	Coleman	137	31-12-10
Roberts, John	Nelson, B. C.	140	6- 4-11
Reid, James	Taber	158	24- 7-11
Richards, Evan	Cardiff	162	17-11-11
Richards, Samuel	Corbin, B. C.	175	17-11-11
Rawlinson, Rowland	Burnis	182	28-11-11
Rayner, Frederick	Frank	188	8-12-11
Radford, James	Bellevue	200	22- 7-12

LIST OF NAMES OF HOLDERS OF THIRD CLASS CERTIFICATES.—*Continued.*

NAME	ADDRESS	CERT. NO.	DATE ISSUED
Rae, John	Coleman	242	31- 7-13
Rankin, William	Cosmer, B. C.	4	28-11-13
Rebar, Mike	Hardieville	19	18- 3-14
Rees, Daniel	Bellevue	56	27-11-14
Russell, Arthur	Standard	59	5-12-14
Russell, John	Mitford	67	20- 1-15
Rees, Gomer	Beverly	96	12-10-15
Robinson, Edward	Drumheller	101	28-10-15
Roberts, David Oliver	Edmonton	106	7- 7-16
Robert, David Clelland	Coleman	113	10- 7-16
Scott, Robert	Lethbridge	6	19-12-98
Scott, Hugh	Lethbridge	8	5- 6-99
Sevlock, Joseph	Canmore	22	25- 6-03
Smith, Robert	Canmore	32	5-12-04
Smith, Hugh	Canmore	35	5-12-04
Stott, John	Lethbridge	38	23-12-04
Spencer, W. J.	Bankhead	51	6- 7-05
Salmond, James M.	Bankhead	6	20-12-05
Sparrow, Edwin	Frank	2	20-12-05
Smith, Ralph	Canmore	3	30- 5-06
Singleton, Robert	Lundbreck	47	29- 5-08
Schmidt, O. P.	Edmonton	44	1- 2-08
Sihvon, William	Bellevue	27	17- 5-07
Scott, Andrew N.	Edmonton	28	23- 5-07
Smith, A. J. P.	Bellevue	103	21- 2-10
Shaw, Thomas John	Canmore	113	3- 6-10
Scott, Alexander	Pocahontas	185	28-11-11
Sherratt, Owen (Sr.)	Coleman	199	13- 7-12
Smith, Thomas	Hillcrest	216	1-11-12
Stobbs, Joseph	Diamond City	217	5-11-12
Shaw, Eli	Canmore	229	30- 4-13
Stephenson, Thomas	Bellevue	230	7- 4-13
Stott, John	Lethbridge	231	7- 4-13
Stephenson, Joseph	Commerce	232	30- 4-13
Saudino, Joe	Bellevue	238	31- 7-13
Steele, John Wilson	Lethbridge	17	16- 3-14
Severns, Matthew	Strathcona	42	8- 9-14
Spencer, Murray A.	Lovett	43	18- 9-14
Snarey, George	Taber	62	5-12-14
Sinclair, James	Drumheller	68	22- 1-15
Smith, John	Blairmore	94	1- 9-15
Smith, T. Edwin	Yetwood	130	26- 7-16
Taylor, William	Lethbridge	10	16- 4-01
Turner, Samuel H.	Frank	21	25- 6-03
Thomas, David	Bankhead	31	5-12-04
			Deceased
Teppo, Herman	Bellevue	19	3- 1-07
			Deceased
Thompson, Thomas	Lundbreck	16	3- 1-07
Tonge, Thomas	Lundbreck	5	30- 5-06
Taylor, Thomas	Lundbreck	30	23- 5-07
			Deceased
Thomas, John J.	Frank	74	21- 4-09
Thompson, Thomas	Coleman	93	29-11-09
Thomas, Joseph D.	Frank	81	25- 8-09
Thomson, Thomas Wilson ..	Bankhead	161	17-11-11

LIST OF NAMES OF HOLDERS OF THIRD CLASS CERTIFICATES.—*Continued.*

NAME	ADDRESS	NO. CERT.	ISSUED DATE
Thompson, Joseph	Coleman	165	17-11-11
Thomas, Isaac	Coleman	204	27- 7-12
Tully, Thomas	Fernie, B. C.	215	1-11-12
Turner, William	Hillcrest	244	31- 7-13
Thomas, John Benjamin ...	Edmonton	46	19-11-14
Thomson, Roger Andrew ...	Lovett	66	22-12-14
Thomson, David	Lovett	82	19- 8-15
Tennant, Robert	Lethbridge	84	19- 8-15
Troman, Samuel	Lethbridge	87	26- 8-15
Turner, Leonard	Nordegg	125	19- 7-16
Thom, George	Pocahontas	142	12-12-16
Vola, Serafino	Canmore	63	1- 2-09
Watkins, W. Ed.	Canmore	1	14-11-98
Wilson, John	Canmore	2	15-11-98
Watkins, John W.	Canmore	3	15-11-98
Waite, Archibald	Taber	11	6- 7-03
Webb, James F.	Canmore	42	8- 4-05
Wilson, Wm. Geo.	Coleman	3	20-12-05
Watters, John	Bankhead	5	20-12-05
Wright, John S.	Canmore	12	3- 1-07
Welsh, Wm. R.	Lundbreck	9	3- 1-07
Wrigley, Walter	Frank	37	10- 1-08
Willmott, William	Canmore	38	10- 1-08
Watters, A. G.	Bankhead	49	29- 5-08
Weston, Thos.	Strathcona	73	7- 4-09
White, Harry	Frank	90	29-11-09
Williams, Walter Edward ..	Clover Bar	213	31-10-12
Williams, John Jenkyn ...	Bickerdike	223	25-11-12
Whitefield, Isaac	Coalhurst	15	10- 3-14
Williams, John T.	Bellevue	33	23- 5-14
Wesledge, William	Nordegg	58	5-12-14
Wardrop, James	Georgetown	72	16- 2-15
Worthington, Thomas	Lethbridge	92	1- 9-15
Wallwork, William	Taber	118	10- 7-16
Watkins, James Morgan ...	Taber	128	26- 7-16
Williams, Albert	Beverly P. O.	138	25- 9-16
Wilcox, William John	Beverly P. O.	140	11-11-16
Young, Thomas	Taber	57	11- 1-09
Young, Samuel	Cardiff	101	18- 1-10

LIST OF NAMES OF PERSONS WHO HOLD MINE SURVEYORS'
CERTIFICATES.

NAME	ADDRESS	CERT. NO.	DATE ISSUED
Aspinall, Francis	Calgary	1	7- 8-15
Adam, William A.	Lethbridge	40	21- 8-15
Ashburner, Edward	Edmonton	79	1- 9-15
Allen, Peter	Coleman	109	23-11-15
Brown, John	Calgary	30	20- 8-15
Billington, Edward E.	Coleman	42	23- 8-15
Biltery, Jean	Taber	73	1- 9-15
Black, Ernest D.	Sewell, Man.	75	1- 9-15
Baxter, Andrew W.	Lethbridge	119	23-11-15
Brown, Hugh Reid	Commerce	125	10- 7-16
Coulthard, Robert W.	Calgary	20	7- 8-15
Church, James A. H.	Edmonton	21	7- 8-15
Charlesworth, Lionel C.	Edmonton	22	7- 8-15
Callander, Ira C.	Pocahontas	39	21- 8-15
Charbonnier, Jules	Blairmore	72	1- 9-15
Cote, Jean L.	Edmonton	80	1- 9-15
Cautley, Reginald H.	Edmonton	81	1- 9-15
Crowder, James	Three Hills	111	23-11-15
Cook, Arnold D.	Taber	113	23-11-15
Davidson, William A.	Coleman	7	7- 8-15
Drinnan, Robert G.	Hillcrest	8	7- 8-15
De Hart, Joseph B.	Coalhurst	45	23- 8-15
Dougall, Ralph	Bankhead	49	23- 8-15
Drummond, Leonard E.	Edmonton	51	23- 8-15
Dunn, Alex. C.	Edmonton	55	23- 8-15
Darbyshire, James	Drumheller	69	1- 9-15
Duggan, William H.	Beverly	84	1- 9-15
Driscoll, Alfred	Edmonton	91	7- 9-15
Dennis, Frederick W.	Bow City	100	9- 9-15
Davis, Alfred	Lethbridge	114	23-11-15
Daniell, Geo. W. B.	Coleman	126	10- 7-16
Elliott, Edward P.	Pocahontas	33	20- 8-15
Ellis, William	Champion	94	7- 9-15
Evans, Daniel	Edmonton	123	29-12-15
Fraser, Norman	Edmonton	15	7- 8-15
Foot, Robert G.	Coleman	54	23- 8-15
Finney, Oswald S.	Edmonton	57	23- 8-15
Flint, William G.	Canmore	76	1- 9-15
Fortner, Edward	Rocky Mtn. House ..	83	1- 9-15
Fraser, Alan Travers	Edmonton	121	18-11-15
Green, Raoul	Blairmore	70	1- 9-15
Gallon, Emile	Bellevue	89	7- 9-15
Gray, David	Wayne	110	23-11-15
Hutchison, David	Hillcrest	29	20- 8-15
Huntrods, Eustace S. F.	Taber	34	20- 8-15
Holden, James O. E.	Drumheller	46	23- 8-15
Hardie, Wm. D. L.	Lethbridge	50	23- 8-15
Hargreaves, James	Drumheller	52	23- 8-15
Hamilton, James F.	Lethbridge	67	1- 9-15
Henderson, Thomas R.	Tofield	56	23- 8-15
Hutchison, William	Hillcrest	68	1- 9-15
Hamilton, Robert	Redcliff	74	1- 9-15

LIST OF NAMES OF PERSONS WHO HOLD MINE SURVEYORS'
CERTIFICATES.—*Continued.*

NAME	ADDRESS	CERT. NO.	DATE ISSUED
Horne, Thomas	Castor	82	1- 9-15
Harrison, Stephen	Lethbridge	85	1- 9-15
Hyde, Marcus L.	Evansburgh	95	7- 9-15
Hamilton, William L.	Passburg	117	23-11-15
Jones, Samuel A.	Edson	26	19- 8-15
Jones, David	Edmonton	32	20- 8-15
Kellett, Walton	Lethbridge	47	9- 9-15
Knight, Richard R.	Edmonton	96	23-11-15
Kellock, George	Coleman	105	23-11-15
Knight, Sidney	Edmonton	123	3-12-15
Livingstone, Robert	Lethbridge	9	7- 8-15
Lee, Robert J.	Elcan	64	1- 9-15
Lavoie, Germain A.	Frank	44	23- 8-15
Lyster, Horace M.	Bankhead	77	1- 9-15
Leblanc, Emile	Taber	107	23-11-15
Morris, James J.	Canmore	14	7- 8-15
Morris, Robert H.	Pocahontas	17	7- 8-15
Milne, Morgan C.	Edmonton	78	1- 9-15
Mills, Harry W.	Bankhead	92	7- 9-15
Maxwell, William	Westville, N.S.	93	7- 9-15
Millar, Andrew A.	Lovettville	97	9- 9-15
Meldrum, William	Lethbridge	98	9- 9-15
Moodie, Kenneth S.	Drumheller	101	9- 9-15
Marshall, John W.	Evansburgh	106	23-11-15
Marsh, John	Taber	124	4- 4-16
McNeill, Walter F.	Calgary	6	7- 8-15
McLeod, John A.	Edmonton	35	20- 8-15
McLenhan, John A.	Edmonton	37	21- 8-15
Macaulay, Angus G.	Coleman	41	23- 8-15
Macaulay, Donald A.	Drumheller	60	31- 8-15
McCulloch, James	Drumheller	104	23-11-15
McDonald, Duncan	Hardieville	118	23-11-15
McVicar, Samuel	Beaver Mines	120	23-11-15
O'Donnell, Thomas	St. Albert	102	9- 9-15
Pitcher, Norman C.	Edmonton	10	7- 8-15
Parker, John L.	Canmore	11	7- 8-15
Pickles, William	Edmonton	24	18- 8-15
Puckett, Owen L.	Lovett	31	20- 8-15
Ponton, Gerald M.	Calgary	63	1- 9-15
Piard, Marc	Bellevue	88	7- 9-15
Powell, Albert Edward	Wabamun	108	23-11-15
Reid, John C.	Lethbridge	12	7- 8-15
Richards, James A.	Calgary	13	7- 8-15
Robertson, John D.	Edmonton	23	7- 8-15
Richards, Charles C.	Commerce	43	23- 8-15
Robertson, John	Drumheller	61	1- 9-15
Reid, Adam H.	Commerce	62	1- 9-15
Robert, Louis P.	Blairmore	65	1- 9-15
Raisbeck, Luke	Grassy Lake	103	23-11-15
Stockett, Lewis	Calgary	2	7- 8-15
Smith, Frank B.	Edmonton	3	7- 8-15

LIST OF NAMES OF PERSONS WHO HOLD MINE SURVEYORS'
CERTIFICATES.—*Continued.*

NAME	ADDRESS	CERT. NO.	DATE ISSUED
Stirling, John T.	Edmonton	19	7- 8-15
Shaw, Wm.	Blairmore	25	19- 8-15
Scott, Andrew M.	Pocahontas	36	20- 8-15
Shanks, John	Nordegg	58	28- 8-15
Stevenson, Wm. (Jr.)	Nordegg	59	31- 8-15
Stevens, Leonard C.	Edmonton	66	19- 5-15
Sutherland, Clyde C.	Edmonton	86	3- 9-15
Stevenson, John	Hardieville	116	23-11-15
Thornton, Norman M.	Edmonton	16	7- 8-15
Thorne, Benjamin L.	Calgary	18	7- 8-15
Thomas, Joseph D.	Passburg	115	23-11-15
Wain, W. Holt	Canmore	4	7- 8-15
Wilson, David G.	Bankhead	5	7- 8-15
Whiteside, O. E. S.	Coleman	27	19- 8-15
Williams, Arthur E.	Bellevue	38	21- 8-15
Williams, Thomas B.	Canmore	48	23- 8-15
Watson, Ronald H.	Mountain Park	53	23- 8-15
Williams, W. P.	Bellevue	71	1- 9-15
Watters, John	Bankhead	87	3- 9-15
Wilson, Wm. R.	Fernie, B.C.	90	7- 9-15
Wark, Samuel D.	Evansburgh	99	9- 9-15
Wheeler, James S.	Calgary	112	23-11-15
Young, W. H.	Calgary	28	19- 8-15

Certificates granted previous to September 1st, 1905, were granted under the provisions of the Coal Mines Regulation Ordinance of the North-West Territories.

Certificates issued between September 1st, 1905, and May 9th, 1906, were issued under the provisions of The Coal Mines Ordinance of the North-West Territories.

Certificates issued between May 9th, 1906, and August 1st, 1913, were issued under the provisions of The Coal Mines Act of the Province of Alberta.

Certificates issued since August 1st, 1913, were issued under the provisions of The Mines Act of the Province of Alberta.

WAGES.

The scale of wages paid in the Province at the end of the year 1916, shows increases over the wages paid in previous years.

The general wage schedule now being paid is as follows:

OUTSIDE WAGES.

Bottom Man	\$2.89 per day, 10 hrs.
Slate pickers (boys)	1.37 per day, 10 hrs.
Slate pickers (men)	2.47 per day, 10 hrs.
Car oilers (men)	2.47 per day, 10 hrs.
Car oilers (boys)	1.65 per day, 10 hrs.
Tally boys	1.37 per day, 10 hrs.
Teamsters	2.89 per day, 10 hrs.
Blacksmiths	3.85 per day, 10 hrs.
Blacksmiths' helpers	2.90 per day, 10 hrs.
Carpenters	3.85 per day, 10 hrs.
Carpenters' helpers	2.90 per day, 10 hrs.
Power house engineers	4.40 per day, 10 hrs.
Power house engineers	3.40 per day, 8 hrs.
Fan-men	2.90 per day, 12 hrs.
Hoisting engineers	3.20 per day, 8 hrs.
Hoisting engineers	3.78 per day, 10 hrs.
Hoisting engineers	4.40 per day, 12 hrs.
Incline engineers	3.40 per day, 10 hrs.
Tail rope engineers	3.63 per day, 8 hrs.
Tail rope engineers	3.85 per day, 10 hrs.
Endless rope engineers	3.30 per day, 10 hrs.
Box-car loader engineer	3.40 per day, 10 hrs.
Tipple engineer	3.40 per day, 10 hrs.
Screen engine tender	2.65 per day, 10 hrs.
Locomotive engineer	3.40 per day, 10 hrs.
Locomotive switchman	3.00 per day, 10 hrs.
Fireman	2.89 per day, 8 hrs.
Fireman	3.37 per day, 10 hrs.
Fireman	3.85 per day, 12 hrs.
Fireman's helper	2.65 per day, 10 hrs.
Water tender	3.25 per day, 10 hrs.
Railway car handler	2.60 per day, 10 hrs.
Tipple dumper (man)	2.89 per day, 10 hrs.
Tipple dumper's helpers	2.64 per day, 10 hrs.
Tipple dumper (boy)	1.65 per day, 10 hrs.
Top cagers	2.64 per day, 10 hrs.
Car repairer	3.40 per day, 10 hrs.
Car repairer's helper	2.90 per day, 10 hrs.
Breaker engineer	3.40 per day, 10 hrs.
Fan fireman	3.40 per day, 12 hrs.
Lampman (depending upon number of lamps and skill of man) ....\$2.47 to	2.89 per day, 8 hrs.
Lampman (depending upon number of lamps and skill of man) ....\$2.47 to	3.40 per day, 12 hrs.
Machinists	\$3.40 to 3.85 per day, 10 hrs.
Machinists' helper	2.90 per day, 10 hrs.
Ashman	2.50 per day, 10 hrs.
Ashman	2.89 per day, 12 hrs.
Wiper (man)	2.89 per day, 12 hrs.
Coupler (man)	2.47 per day, 10 hrs.
Coupler (boy)	1.65 per day, 10 hrs.
Breaker oiler	2.89 per day, 11 hrs.
Washer or tipple oiler	2.89 per day, 11 hrs.
Breaker, picker boss	2.89 per day, 10 hrs.
Timber framer	3.40 per day, 10 hrs.
Timber sawyer	2.64 per day, 10 hrs.
Box-car shoveller	2.89 per day, 10 hrs.
Breaker platform boss	2.89 per day, 10 hrs.

DEPARTMENT OF PUBLIC WORKS

Breaker platform men	\$2.60 per day, 10 hrs.
Breaker screen men	2.47 per day, 10 hrs.
Rock bank men	2.47 per day, 10 hrs.
Dirt bank men	2.47 per day, 10 hrs.
Finisher after box-car loader	2.47 per day, 10 hrs.
All other labour not classified	2.47 per day, 10 hrs.

BEE-HIVE COKE OVENS

Levelling and drawing (6½ ton charge) per oven	\$1.00
Levelling and drawing (5 ton charge) per oven	.80
Loading into box or open cars (over 200 tons per month) per ton	.17
Loading into box or open cars (less than 200 tons per month) per ton	.16
Steam locomotive engineer	\$3.40 per day, 10 hrs.
Motorman	3.18 per day, 10 hrs.
Larryman	2.47 per day, 10 hrs.
Plasterers	2.47 per day, 10 hrs.
Carters and cleaners	2.47 per day, 10 hrs.
All other labour	2.47 per day, 10 hrs.

BELGIAN COKE OVENS

Ram engine man	\$3.40 per day, 10 hrs.
Chargers	2.89 per day, 10 hrs.
Clayers	2.89 per day, 10 hrs.
Drawers	2.89 per day, 10 hrs.
Loaders	2.60 per day, 10 hrs.

BRIQUETTE PLANT

Engineer	\$3.86 per day, 12 hrs.
Briquetter	3.97 per day, 12 hrs.
Briquetter's helper	3.40 per day, 12 hrs.
Tar melter	2.89 per day, 12 hrs.
Labourers	2.89 per day, 12 hrs.

INSIDE WAGES

Shot lighter	\$3.30 per day, 8 hrs.
Bratticeman	3.30 per day, 8 hrs.
Bratticeman's helper	2.75 per day, 8 hrs.
Timberman	3.30 per day, 8 hrs.
Timberman's helper	2.75 per day, 8 hrs.
Tracklayers	3.30 per day, 8 hrs.
Tracklayer's helper	2.75 per day, 8 hrs.
Motorman	3.05 per day, 8 hrs.
Motorman's helper	2.75 per day, 8 hrs.
Locomotive engineer	3.05 per day, 8 hrs.
Locomotive switchman	2.75 per day, 8 hrs.
Drivers	3.03 per day, 8 hrs.
Drivers (wet places)	3.30 per day, 8 hrs.
Drivers (spike team)	3.50 per day, 8 hrs.
Couplers (men)	2.75 per day, 8 hrs.
Couplers (boys)	1.65 per day, 8 hrs.
Switch boys	\$1.37 to 1.65 per day, 8 hrs.
Door boys	1.10 per day, 8 hrs.
Rope riders	3.03 per day, 8 hrs.
Main and tail rope riders	3.30 per day, 8 hrs.
Pushers	2.75 per day, 8 hrs.
Buckers	2.75 per day, 8 hrs.
Loaders	2.75 per day, 8 hrs.
Miners	3.30 per day, 8 hrs.
Miners (wet places)	3.75 per day, 8 hrs.
Rock miners	3.75 per day, 8 hrs.
Timber handlers	3.03 per day, 8 hrs.
Cagers, slope and incline	2.75 per day, 8 hrs.
Cagers (shaft)	3.30 per day, 8 hrs.
Machinemen	3.75 per day, 8 hrs.

Machinemens' helper	\$3.30	per day,	8 hrs.
Pumpmen	2.75	per day,	8 hrs.
Pumpmen (Galt Mines)	3.20	per day,	8 hrs.
Hoistmen	\$3.03 to	3.30	per day, 8 hrs.
Drivers (boys)	\$1.65 to	2.75	per day, 8 hrs.
Grippers	2.75	per day,	8 hrs.
Grippers (boys)	\$1.65 to	2.75	per day, 8 hrs.
Pipe fitters' helpers	2.75	per day,	8 hrs.
Pick carriers	\$1.37 to	2.75	per day, 8 hrs.
Clutchmen	3.30	per day,	8 hrs.
Rollermen	2.75	per day,	8 hrs.
All other labour not classified	2.75	per day,	8 hrs.
Miners on contract average from \$3.50 to \$6.00	per day, 8 hours.		

This scale of wages is taken from an agreement made with representatives of approximately sixty per cent. of men employed in mines in the Province, and went into force on April 1st, 1915, and will continue in force until March 31st, 1917.

In addition to the wages mentioned above the following war bonus was put into effect on August 16th, 1916, and is still being paid:

5% on all Contract Mining Rates.

8% on all Contract Coke Oven Rates.

12½% on all Day Wage Rates under \$2.47 per day.

10% on all Day Wage Rates between \$2.47 and \$3.03 per day.

28c per day on Day Wage Rate of \$2.47 per day.

27c per day on Day Wage Rate of \$3.03 per day.

25c per day on all Day Wage Rates above \$3.03 per day.

The following statement gives particulars regarding receipts and expenditures during the year 1916:

	Receipts	Expenditure
Salaries and Expenses of Inspectors		\$18,223.05
Grant to Rocky Mountain Branch Canadian Mining Institute		250.00
Services of Examiners		726.14
Printing, Stationery and Sundries		638.60
Maintenance of Mine Rescue Stations		12,337.75
Examination and Certificate Fees	\$1,713.00	
Sales of Mines Act	125.25	
Reimbursement account of Mine Rescue Stations	5,039.58	
Total	\$6,877.83	\$32,175.54

Your obedient servant,

JOHN T. STIRLING,

Chief Inspector of Mines.

THE STEAM BOILERS BRANCH

Edmonton, January 31, 1917.

L. C. CHARLESWORTH, Esq.,

Deputy Minister of Public Works,

Edmonton, Alberta.

Sir,—I have the honour to submit the following report covering the work performed by the Steam Boilers Branch during the year ending December 31st, 1916.

Several changes have been made in the staff of inspectors during the year, as follows:

On May 1st I was appointed to the office of Chief Inspector of Boilers, succeeding Mr. J. Buxton, who was transferred to Calgary, taking charge of that district and replacing Inspector Gray. Mr. Gray was in turn transferred to Medicine Hat on account of the resignation of Inspector E. S. Hodges. Another change occurred owing to the resignation of Inspector D. Fraser of Edmonton district, who for some time had been suffering from ill-health and was obliged to retire on November 30th, after eleven years' service with the Department. Assistant Inspector J. F. Cargill, of Lethbridge, was promoted to this district to fill the vacancy, and Mr. T. J. Hargreaves, late master mechanic of Hillcrest mines, has been appointed assistant inspector of the Lethbridge district, the appointment taking effect on November 27th. A further change has been made by transferring the headquarters of Inspector Douglas from Red Deer to Camrose, from which latter point, on account of the better railroad facilities Camrose affords, he is able to conduct the work of this territory with greater convenience and economy. The large number of boilers scattered through Inspector Douglas' territory (which extends from three miles north of Bowden to Leduc, a distance of ninety-six miles, and from the Saskatchewan boundary westward to the saw-mill camps and coal mine plants near the mountains, at least two hundred and forty miles in this direction) could not be satisfactorily handled by one inspector, therefore with your consent, an assistant inspector was appointed, Mr. J. F. Hawkins being chosen for the position and appointed on June 15th.

The foregoing inspection staff is now disposed as follows:

Edmonton District	J. F. Cargill	Edmonton
	J. H. Mainwaring	Edmonton
Camrose District	John Douglas	Camrose
	J. F. Hawkins	Camrose
Calgary District	Joseph Buxton	Calgary
	A. W. Dick	Calgary
Lethbridge District	N. Marshall	Lethbridge
	T. J. Hargreaves	Lethbridge
Medicine Hat District	William Gray	Medicine Hat

At the headquarters of the Branch the office staff, composed of one chief clerk, and one clerk who also acted as stenographer, attend-

ed to the clerical duties until October, when the amount of correspondence, etc., increased beyond their abilities to cope with it during office hours, in consequence of which a stenographer was added to the staff.

The system adopted several years ago for undertaking the inspection of all the boilers contained in the Province was by dividing the territory into five districts. Three of these were covered by six inspectors, a district and an assistant inspector to each one, and the two remaining districts were each served by one inspector. Owing to the rapid increase of boilers in certain portions of these districts, a revision of the territory covered by the inspector was found necessary this year. This revision permitted a change of headquarters for Inspector Douglas from Red Deer to Camrose, and divided the work more equally amongst the other inspectors, thereby providing for a more uniform service in the Province than hitherto.

The total number of boilers inspected during the year is 1,918. Of these, 367 were low pressure heating boilers.

A summary of the various types of boilers inspected during the year follows:

Locomotive	1161
Horizontal Tubular	381
Water Tube	65
Vertical Tubular	119
Return Flue	54
Marine Dry Back	11
Air Receivers	3
Steel Heating Boilers	56
Cast Iron Sectional Heating Boilers	68
Total	1918

The condition of these boilers was found to be as follows:

Good	1252
Fair	610
Moderate	29
Poor	8
Condemned	9
Total	1918

Serious damage is reported to a number of high pressure boilers, due to negligence in care and operation. Six of these were of the locomotive type, and in every instance the damage to the latter was caused by over-heating of furnace plates due to shortage of water, or neglect in cleaning out, thus causing the crown sheet to be permanently bulged between crown stays. One horizontal tubular boiler was overheated and so badly damaged, due to accumulated deposit on the fire sheet, that one half of the first course had to be removed and a new fire sheet inserted to permit operating the boiler at reduced pressure.

Four low pressure steel and several cast iron heating boilers are reported to have failed, owing to gross ignorance of the caretakers in charge of them. Two of these boilers were located in the Westminster School, Lethbridge, and two others at the Separate School, Lethbridge. In consequence of these accidents, I recommended the Lethbridge School Board to require the janitors at each city school equipped with a steam-heated plant, to undergo an examination before the

district inspector, similarly to the Edmonton and Calgary School Board requirements, and I understand a committee was recently appointed by the Board to arrange for these measures being carried out.

The regular spring examinations of Candidates for Engineers' Certificates, as previously held at advertised points throughout each district, were abandoned this year in the Calgary, Medicine Hat and Lethbridge districts, on account of the exceptionally good railroad facilities in this section of the Province, which enables candidates to conveniently attend the regular examinations that are held on the first Saturday in each month at the Inspectors' headquarters. In the Camrose and Edmonton district, examinations were held at 26 advertised points, including three in the vicinity of Peace River and Grande Prairie.

A total of 1,214 Engineers' Certificates were granted to successful candidates during the year.

Under provisions of Section 34 of the Act, 323 permits were issued to owners of boilers and engines, who were unable to immediately secure the services of duly qualified engineers.

Six engineers have been suspended for neglect of duty under Section 49 of the Act, four of these having been relieved of their certificates for six months and the other two for twelve months.

Convictions were obtained in ten cases or prosecution for violation of the Act, 9 for illegal operation (Sections 33 and 35) and one for violation of the Provisions of Section 14. The aggregate fines imposed and collected amounted to \$335.73.

The five motor cars operated by the Branch for inspection service covered a total of 22,723 miles during the year at a cost of 7c per mile. Two of the cars have been in service for four years, and these were turned in for general repairs and overhauling, one at the Government garage, Edmonton, and the other at the Technical Institute, Calgary. Two new Ford cars have been purchased to replace them. It is intended to utilize the old cars for further service after overhauling from time to time in the event of breakdown or such contingencies.

No fatalities have been reported due to the explosion of a boiler. One man, however, lost his life and another was severely injured through loose portions of their clothing being caught in the gear of traction engines while in operation. The manufacturers are now encasing the gear in sheet steel casings to protect the operator against such accidents. Another accident occurred in removing handhole doors from a boiler containing hot water which was understood to be empty, one man being scalded. A further accident was caused by the bursting of a lubricator sight feed glass by which an engineer lost the sight of one eye.

Referring to my personal duties: According to your instructions, I have, as time permitted, undertaken the supervision of the Government power plants in service at the Provincial Institution at Fort Saskatchewan, Edmonton Parliament Buildings, Ponoka Asylum and Lethbridge Jail, thereby succeeding Mr. W. Todd, late mechanical superintendent. In this capacity I have reported to Mr. R. P. Blakey, the Provincial Architect, who will, I understand, in turn report to you upon the operations of these plants.

About fifty designs of boilers, boiler accessories, power plant arrangements, etc., have been submitted for survey and registration under Section 12 of the Act. Of these, 13 new boiler designs were approved and registered, together with 21 boiler accessory and 4 power plant designs. The revenue collected from the source amounts to \$236.50.

A schedule of Certificates issued and fees collected, Expenditures of the Branch, Inspectors' Annual Reports, list of Manufacturers, and list of Final Certificates issued to December 31st, follows:

I have the honour to be, Sir,

Your obedient servant,

F. W. HOBSON,

Chief Inspector of Boilers.

SCHEDULE

	1915	1916
Number of Certificates issued for boilers inspected	1946	1860
Number of advertised examinations for engineers held	32	26
Number of First Class Certificates issued	7	4
Number of Second Class Certificates issued	20	28
Number of Third Class Certificates issued	116	117
Number of Traction Final Certificates issued	209	270
Number of Firemen's Final Certificates issued	50	28
Number of Provisional Certificates issued	462	549
Number of Renewals of Provisional Certificates issued	191	172
Number of Second Provisional Certificates issued	47	46
Number of Permits issued	200	323

FEES COLLECTED

	1915	1916
For inspection of Boilers	\$ 9,058.00	\$ 8,517.00
For special inspection of boilers, etc.	455.80	564.70
For examination of engineers for Final Certificates	2,045.00	2,380.00
For Provisional Certificates	2,285.00	2,665.00
For renewal of Provisional Certificates	478.00	430.00
For Second Provisional Certificates	235.00	235.00
For Permits	1,000.00	1,615.00
For Survey of Drawings	484.50	236.50
Totals	\$16,041.30	\$16,643.20

EXPENDITURES

For the year ending December 31, 1916, in connection with the administration of the Boilers Act.

Inspectors' salaries and expenses	\$25,451.63
Automobile expenses	2,681.36
Railway transportation	576.30
Printing, advertising and sundries	933.77
Total	\$29,643.06

Edmonton, January 5, 1917.

L. C. CHARLESWORTH, Esq.,

Deputy Minister of Public Works,

Edmonton, Alberta.

Sir,—I have the honour to submit to you my annual report as District Inspector of Boilers for the year ending December 31, 1916, in accordance with Section 8 of The Boilers Act.

In the month of December, 1915, I was granted leave of absence on account of sickness, and resumed my duties on February 1st, 1916, the work in the meantime having been carried on by Mr. F. W. Hobson.

On March 4th I commenced holding the spring examination of Candidates for Engineers' Certificates as advertised throughout the Province at twelve different points, finishing these at St. Paul des Metis on March 29. There had been several requests received by the Department from the Peace River district to have examinations held in that part of the Province, and it was decided to hold these at McLennan, Peace River and Grande Prairie City, Inspector Mainwaring being sent north to attend to this work. The number of candidates taking advantage of the Spring examinations totaled 68 and in addition to these, 220 were examined at the regular monthly examinations held in the Orange Hall, Edmonton South, from January to November inclusive, making a total of 288 candidates examined. Twelve others offered but were turned down, owing to lack of the necessary experience required by the Act.

The number of boilers inspected by me during the year for which certificates were issued, totalled 144; the following being a summary of the different types inspected, and their condition.

Type of boilers inspected:

Locomotive	33
Horizontal tubular	49
Vertical	32
Water tube	14
Robb Mumford	9
Marine	1
C. I. Heating	5
Incinerator	1
Total	144

Condition of boilers inspected:

Good	98
Fair	46
Total	144

Nine other boilers were inspected but were not included in the foregoing, no certificates having been issued therefor.

I have to report one accident which occurred at the Acme Brick Company's plant, whereby Engineer Strand lost the sight of one eye through the bursting of a lubricator glass.

Twenty permits were issued during the year to owners of plants under the provisions of Section 34 of The Boilers Act, they having

satisfied me of their inability to secure the services of qualified engineers.

I have no cases of prosecutions to report respecting violations of any of the provisions of The Boilers Act.

Consequent upon my continued ill-health, I have been compelled to resign my position as Inspector of Boilers, my services terminating on the 30th of November.

I have the honour to be, Sir,

Your obedient servant,

D. FRASER,

District Inspector of Boilers.

Edmonton, January 2, 1917.

L. C. CHARLESWORTH, ESQ.,

Deputy Minister of Public Works,

Edmonton, Alberta.

Sir,—I have the honour to submit to you my annual report as Inspector of Boilers for the year ending December 31, 1916, in accordance with Section 8 of The Boilers Act.

My time during the early months of the year was devoted to the inspection of boilers at the various power plants in and around the Crow's Nest Pass District, travelling being done by train. Immediately weather conditions became favorable to automobile travel, I commenced to inspect traction boilers, working, as in previous years, the district north of Lethbridge, and had almost covered this part of the country when advice was received from headquarters that the territory included in District Number One had been extended. I therefore continued working north until all the boilers had been inspected up to the new boundary line.

Owing to the extension of the northern boundary, a very large number of boilers in the southern part of the district have not been inspected this year, it having been found impossible to visit several of the districts for any purpose.

The total number of boilers inspected by me in District Number One from January to November inclusive, is 256. The condition of these is as follows:

Good	175
Fair	65
Moderate	12
Condemned	4
Total	256

The various types of boilers inspected are enumerated as follows :

Locomotive	184
Horizontal tubular	47
Vertical	10
Robb Mumford	6
Water tube	7
Return Flue	2
Total	256

During the year I made 7 special inspections of boilers at the request of the respective owners, all expenses incidental thereto being defrayed by them as required by Section 6 of The Boilers Act.

Twelve permits were issued by me under Section 34 of The Boilers Act to owners of steam boilers, who at the time were unable to secure the services of engineers holding necessary certificates.

Recommendations were sent to the Department for the issue of provisional certificate to five new candidates, and for the renewal of this class of certificate to three others whose originals had expired.

While on inspection work during the summer, I found it necessary, in one instance, to prosecute an owner under Sections 14 and 15 of The Boilers Act, conviction being obtained and minimum penalty imposed.

Following the resignation of Inspector Fraser from the staff at the end of November, I was appointed to the position of inspector of the Edmonton District, taking over the duties on December 1st. From that date to the end of the year I inspected 15 boilers, issuing certificates for 14 of them, the remaining one being condemned of account of excessive corrosion.

The condition of these was as follows :

Good	8
Fair	6
Condemned	1
Total	15

The various types of boilers inspected :

Horizontal tubular	9
Water tube	2
Robb Mumford	1
Robb Brady	1
Locomotive	1
Return flue	1
Total	15

Eighteen candidates came up for examination in the Orange Hall, in the month of December, to write for Engineers' Certificates, three of whom failed to qualify for the class in which they sat, but were granted certificates of a lower grade. The following shows the various classes of Certificates issued :

Third Class	3
Final Traction	1
Provisional	13
Renewal of Provisional	1
Total	18

One permit has been issued under Section 34 of The Boilers Act.

I am pleased to be able to report that no accident entailing personal injury to any one in connection with the operation of boilers and engines has come under my notice during the year.

I have the honour to be, Sir,

Your obedient servant,

J. F. CARGILL,

Inspector of Boilers, District No. 4.

Edmonton South, Jan. 3, 1917.

L. C. CHARLESWORTH, ESQ.,

Deputy Minister of Public Works,

Edmonton, Alberta.

Sir,—I have the honor to submit to you my annual report as Assistant Inspector of Boilers in the Edmonton District for the year ending December 31, 1916, in accordance with Section 8 of The Boilers Act.

The year's work commenced with the usual trip along the line of the Grand Trunk Pacific, beginning at Jasper Park, taking in the Brazeau plant, and inspecting all accessible boilers north and south of the railway line, reaching Entwistle on the 23rd of February. From this time to the 20th of March I was occupied holding examinations of candidates for engineers' certificates at Spirit River, Grande Prairie and Peace River, after which I inspected a few boilers in and around Edmonton.

Early in April I started out, travelling by team, and inspected all boilers (excepting those in the Stony Plain district) as far west as Entwistle, then north-west to Whitecourt and Campsie, north to Athabasca, also a few boilers in Plamondonville and Lac La Biche districts. Leaving Lac La Biche and coming south of the Saskatchewan river, my time, for the rest of the season, was devoted to boilers located between Range 10 and Edmonton, most of which had not been inspected since the year 1913, but owing to the large increase in the number of the boilers it was impossible to inspect more than 50% of them.

Owing to the vast amount of territory in districts Nos. 4 and 5, no attempt was made this year to inspect boilers in the country lying east of Range 10, West of the Fourth Meridian, as this territory was well covered last year.

In all 268 boilers were inspected during the year, condition of same being as follows:

Good	166
Fair	98
Poor	3
Bad	1
Total	268

Boilers inspected and Certificates issued therefor	253
Boilers inspected and no Certificates issued therefor ..	5
Boilers inspected which need repairing	10

Five boilers were inspected free under the provisions of Section 5, Sub-section 5 of the Act.

Special inspection was made of two boilers, upon receipt of request from the owners thereof, all expenses incidental thereto being defrayed by them as provided in Section 6 of The Boilers Act.

During the year I recommended the issue of engineers' certificates to 39 candidates, these being graded as follows:

Third Class	5
Traction Final	2
Provisional	20
Renewal of Provisional	12
Total	39

Six permits were issued in accordance with Section 34 of The Boilers Act.

I have one case of prosecution to report for violation of Section 33, the defendant being convicted and the minimum fine with costs imposed.

I have no accident cases of any kind to report in connection with the operation of boilers and engines during the year.

I have the honour to be, Sir,

Your obedient servant,

J. H. MAINWARING,

Assistant Inspector of Boilers.

Camrose, January 27, 1917.

Sir,—I have the honour to submit to you my annual report for the year 1916 as Inspector of Boilers in Number 3 District, as required by Section 8 of The Boilers Act.

After returning from the Inspectors' conference at Edmonton, I inspected the boilers in the plant at Ponoka, afterwards inspecting the boilers at Stettler, Didsbury, Camrose and Innisfail, finishing this work in the early part of March. The balance of that month I was engaged holding the advertised Spring Examinations of Candidates for Engineers' Certificates at eight of the principal towns throughout the district. The balance of the year was spent mostly in inspecting agricultural boilers.

The change of my headquarters from Red Deer to Camrose has given general satisfaction to all concerned, consequent upon the latter town having better railroad facilities and occupying a more central position in the district.

Owing to the wonderful development in central Alberta within the last four years, with a corresponding increase in the number of agricultural boilers, I have only been able to visit many of these about

once in three years, but, now that an assistant inspector has been appointed, the boilers in the district will receive far better attention.

Special inspections of boilers were made at Killam, Scollard and Clive at the request of owners, who paid all expenses in connection therewith, as provided under Section 6 of The Boilers Act.

Travelling generally was very bad during the year, owing to the abnormal rainfall, but I was pleased to note a great improvement in the roads west of Wetaskiwin and Ponoka since I was through that country three years ago, but boilers are still going in further west, and I experience great difficulty in reaching some of these.

A total of 258 boilers were inspected by me during the year, certificates being issued for 254. A summary of their condition is as follows:

Good	152
Very Fair	80
Fair	26
Total	258

The following shows the different types of boilers inspected.

HIGH PRESSURE

Locomotive Firebox	125
Horizontal tubular	51
Return flue	9
Vertical tubular	18
Internal furnace	6
Air receivers	3
Total	212

LOW PRESSURE AND HEATING BOILERS.

Horizontal C. I. Sectional	20
Vertical C. I. Sectional	1
Horizontal tubular (steel)	18
Vertical tubular (steel)	7
Total	46

Conditions regarding heating plants begin to show a marked improvement in this district, and the fact that heating boiler designs have now to be submitted to the Department for approval and registration before being allowed to enter the Province, will help considerably in the "Safety First" movement.

In addition to the Spring examinations of Candidates for Engineers' Certificates in the month of March, I have held the usual monthly examinations at headquarters in Camrose on the first Saturday in each month. A total of 219 candidates were examined during the year for engineers' and final fireman's certificates; 29 of these failed to qualify, but were recommended for certificates of a lower grade; 4 others were advised to present themselves for examination after a further period of 12 months' experience.

The following shows the various classes of certificates recommended:

First Class	11
Thrd Class	13
Traction Final	61
Traction Provisional	93
Stationary Provisional	12
Renewal of Provisional	27
Final Fireman	8
Total	115

Correspondence has been fairly heavy and takes up considerable time over and above the routine office work, a total of 1,172 letters having been dispatched from this office during the past 12 months.

There has been a scarcity of Traction Engineers this year, which necessitated my issuing 46 permits, under Section 34 of The Boilers Act, to enable owners to keep their outfits in operation, in each case assurance being given by the employer to the effect that it was impossible at the time to secure the services of a duly qualified and certificated engineer.

I have one accident to report, whereby Fireman Burns of the Western General Electric plant at Red Deer, was scalded through knocking in a handhole plate without first ascertaining that the boiler was empty. This might have been a serious accident, considering the cramped position one has to assume before being able to knock in the lower handhole plate of a Robb-Mumford boiler. The chief engineer of the plant has been advised to instruct any new fireman to first ascertain that there is no vacuum in the boiler, and that the boiler is emptied of water before knocking in any handhole plate.

Three cases of illegal operations were reported to me, the information being passed on to the Mounted Police, who succeeded in securing a conviction in two of the cases, the minimum fine being imposed.

I have the honour to be, Sir,

Your obedient servant,

JOHN DOUGLAS,

District Inspector of Boilers,

District No. 3.

Camrose, January 27th, 1917.

Sir,—I have the honor to submit to you the report of my work since my appointment as Assistant Inspector of Boilers for this district, in accordance with Section 8 of The Boilers Act.

The first six week after my appointment were spent in company with Inspector Douglas on an inspection tour, which included the district west of the Calgary and Edmonton railroad, as far west as Rimbey, north-west past Iola, and nearly to Buck Lake, thence mostly east to Millet, inclusive.

Since then I have inspected the boilers from Halkirk south to Township 33, and east to Saskatchewan, and as far north as the Grand Trunk Pacific railroad, and west to Hardisty inclusive.

As a general rule I found The Boilers Act well observed, which I think is due in a great measure to the co-operation of the Royal North-West Mounted Police in its enforcement.

I have three cases of violation of Section 33 of The Boilers Act. One case I prosecuted myself, the other two being turned over to the Mounted Police officer in charge at Provost. In all three cases a conviction was secured and the minimum fine imposed.

Twelve permits were granted by me as provided in Section 34 of The Boilers Act to owners who were unable to secure the services of duly qualified engineers.

A total of one hundred and twenty-two boilers were inspected by me, and their condition was as follows:

Good	64
Very Fair	28
Fair	8
Poor	2
Total	122

The following is a summary of the different types of boilers inspected by me:

Locomotive firebox	108
Horizontal Tubular	5
Vertical fire tube	1
Return Flue	2
Cast Iron (Heating)	5
Horizontal Tubular (Heating)	1
Total	122

Boilers inspected and No. Certificates issued therefor..... 2

I am pleased to report that I have no accidents reported, and that as far as I am aware there has been no personal injury to any one connected with the operation of boilers within the district that I have covered.

I have the honour to be, Sir,

Your obedient servant,

J. F. HAWKINS,

Assistant Inspector of Boilers,

District No. 3.

Calgary, January 4, 1917.

L. C. CHARLESWORTH, ESQ.,

Deputy Minister of Public Works,

Edmonton, Alberta.

Sir,—I have the honor to submit to you my annual report for the year ending December 31st, 1916, in accordance with Section 8 of The Boilers Act.

In the month of January a conference of all district inspectors was held at Edmonton for the purpose of discussing general matters pertaining to the more efficient working of the districts as a whole throughout the Province. At this session new sets of examination questions were drawn up for the use of the inspectors when examining candidates at their respective headquarters for the various classes of Engineers' Certificates issued by the Department. At the close of the conference the inspectors left to prepare for the spring examination of candidates at the different points throughout the Province. The months of February, March and April were devoted to the general work incidental to the Chief Inspector of Boilers in the office at Edmonton.

On May 1st, in accordance with your instructions, I was transferred to Calgary to take over my old position as District Inspector of Boilers, succeeding Inspector William Gray, who has been transferred to the Medicine Hat District. Since that time I have inspected 111 boilers and one air receiver. Number of inspection certificates issued 112.

Types and condition of same are as follows :

Locomotive firebox	48
Horizontal Tubular	39
Water Tube	10
Vertical Firetube	5
Marine (Dry Back)	2
Robb Mumford	5
Cast Iron sectional	3
Total	112

Condition :

Good	71
Very Fair	29
Fair	12
Total	112

One H. T. boiler was found to be so badly bulged in the bottom of front ring, caused by oil deposits and scale, that it was found necessary to put in a new half course and at the same time reduce the steam pressure to 15 pounds.

During the year 220 candidates for Engineers' Certificates presented themselves for examination, 3 of whom failed to qualify. Certificates recommended are classed as follows:

First Class	2
Second Class	8
Third Class	27
Traction Final	55
Firemans' Final	11
Second Provisional	7
Provisional Certificates and renewals	107
Total	217

Fifty-six permits were issued under the provisions of Section 34 of The Boilers Act, to accommodate owners until such time as the services of qualified engineers could be secured.

I have no cases to report in connection with accidents incidental to the operation of boilers and engines in this district during the year.
I have the honour to be, Sir,

Your obedient servant,

JOS. BUXTON,

Inspector of Boilers.

Calgary, January 3, 1917.

L. C. CHARLESWORTH, Esq.,

Deputy Minister of Public Works,

Edmonton, Alberta.

Sir,—I have the honor to submit to you my annual report for the year 1916, as Assistant Inspector of Boilers, District No. 2, in accordance with Section 8 of The Boilers Act.

My time has been occupied with the usual inspection work, together with assisting Inspector Buxton when holding examinations of candidates for Engineers' Certificates on the first Saturday of each month throughout the year.

The extreme wet weather experienced in this district during the spring and summer months greatly interfered with the work of boiler inspection and rendered travel, in the country district, very difficult. A total of 261 boilers were inspected, made up of the following types:

Locomotive	125
Horizontal Tubular	65
Vertical	35
Return Flue	3
Water Tube	23
Scotch Dry Back	5
C. I. Sectional	5
Total	261

Condition of boilers inspected:

Good	161
Fair	97
Moderate	2
Condemned	1
Total	261

Boilers inspected and Certificates issued thereto.....	258
Boilers inspected and no certificates issued	3

A number of special inspections of boilers were made in different parts of the district during the year, all expenses incidental thereto being paid by the owners in accordance with provisions of Section 6 of The Boilers Act.

A considerable number of new traction engines have been shipped into the district this year, and several of the coal mining plants have increased in boiler power.

I have no cases to report relative to violation of the Act.

I have the honour to be, Sir,

Your obedient servant,

A. W. DICK,

Assistant Inspector of Boilers,

District No. 2.

Lethbridge, January 2, 1917.

L. C. CHARLESWORTH, Esq.,

Deputy Minister of Public Works,

Edmonton, Alberta.

Sir,—I have the honour to submit to you my annual report for the year ending December 31st, 1916, in accordance with Section 8 of The Boilers Act.

Engineers' examinations have been held in the Court House Building, Lethbridge, on the first Saturday of each month throughout the year. The following shows the number and classes of certificates recommended to be issued:

First Class	1
Second Class	7
Third Class	18
Final Traction	45
Final Fireman	1
Provisional	115
Renewal of Provisional	14
Total	201

Eight of the candidates failed to pass the examination in the class written for, but were granted certificates of a lower grade.

A total of 226 boilers were inspected by me during the year, the condition of same being as follows:

Good	145
Fair	73
Moderate	5
Condemned	3
Total	226

Types of boilers inspected:

Locomotive	180
Horizontal Tubular	29
Water Tube	5
Robb Mumford	3
Vertical Fire Tube	6
Robb Brady	1
Marine	2
Total	226

Owing to the number of new boilers that have been shipped into this district, and the addition to the district of a territory comprising an area of more than 2,700 square miles, it has been utterly impossible for only two inspectors to inspect all the high pressure boilers. No heating boilers have been inspected and tested in this district this year. All boilers, after being at work for a season, should be inspected, and in order to permit of this being done, the services of a third inspector of boilers will be required.

Numerous inquiries have been received from the owners of threshing engines asking why their boilers were not inspected and tested as in previous years. Attending to this correspondence has entailed extra office work. The following letters have been received and dispatched during the year:

Letters received	1555
Letters dispatched	1821

There has been a great scarcity of traction engineers in this district, and in order to enable owners to keep their plants in operation, I have issued 101 permits under the provisions of Section 34 of The Boilers Act.

Six fireboxes of locomotive type boilers have been damaged during the year, the damage in each case being due to the boilers not having been properly cleaned.

I have to report four accidents to heating boilers, three of them caused by shortage of water, and the fourth was due to the boiler not having been washed out for some considerable time. These accidents are mainly attributable to the gross carelessness and ignorance of the men in charge. I am pleased to be able to report that no one has been injured in this district during the year by accidents to boilers, nevertheless, it is miraculous that in the case of the heating boilers aforementioned, no personal injuries were sustained.

There have been two serious accidents in connection with the operation of traction engines during the threshing season, one of them proving fatal. In each case the loose clothing worn by the engineer was caught in the gear of the engine while the same was running.

I have the honour to be, Sir,

Your obedient servant,

NAT MARSHALL,

Inspector of Boilers, No. 1 District.

Medicine Hat, January 3, 1917.

L. C. CHARLESWORTH, ESQ.,

Deputy Minister of Public Works,

Edmonton, Alberta.

Sir,—I have the honour to submit to you my annual report for the year ending 1916, as Inspector of Boilers, Medicine Hat, District No. 6, in accordance with Section 8 of The Boilers Act.

Examinations were held here at the beginning of each month, and the following are results of same:

The number of candidates taking examination for Engineers' Certificates totalled 101.

Second Class Certificates	4
Third Class Certificates	4
Final Traction Certificates	9
Final Fireman's Certificates	1
Provisional Certificates	64
Renewal of Provisional Certificates	19
Total	101

Of these candidates three failed to qualify for the class of certificate they tried for, but were granted certificates of a lower grade.

A total of 232 boilers were inspected by me during the year, and a summary of the condition and types of these boilers is as follows (Inspector Hodges examined 18 boilers in this district before I took charge, and they are included in the list):

Condition of boilers:

Good	191
Moderate	10
Fair	46
Bad	3
Total	250

Types of boilers:

Locomotive	141
Horizontal Tubular	33
Water Tube	4
Vertical Tubular	11
Return Flue	3
Marine (dry back)	1
Heating (steel)	30
Heating (cast iron)	27
Total	250

Forty-two permits were issued under Section 34 of The Boilers Act to owners who were unable to immediately secure the services of certified engineers.

I have not any cases of either boiler explosions or personal injury to anyone to report in connection with the operation of boilers and engines.

I have the honour to be, Sir,

Your obedient servant,

WILLIAM GRAY,

Inspector of Boilers,

District No. 6, Medicine Hat, Alta.

The following is a complete list of manufacturers whose designs for boilers and boiler accessories have been submitted to and approved by the department.

MANUFACTURERS OF BOILERS.

Canada.

American Radiator Co., Toronto, Ontario.
 American-Abell Co., Toronto, Ontario.
 Bell (Robert) Co., Seaforth, Ontario.
 Beatty (M.) & Son, Welland, Ontario.
 Berg Manufacturing Co., Toronto, Ontario.
 Caledonian Ironworks, Montreal.
 Canada Iron Corporation. Ltd., Midland, Ontario.
 Canada Foundry Company, Toronto, Ontario.
 Canadian Allis-Chalmers, Ltd., Toronto, Ontario.
 Canadian Locomotive Works, Kingston, Ontario.
 Doty Engine Works, Goderich, Ontario.
 Dominion Bridge Co., Montreal, P.Q.
 Fraser & Chalmers Co., Montreal, P.Q.
 Grand Trunk Pacific Railway Co., Winnipeg, Manitoba.
 Goldie & McCulloch, Ltd., Galt, Ontario.
 Inglis (John) Co., Ltd., Toronto, Ontario.
 International Engineering Works, Ltd., Amherst, N.S.
 Jenckes Machine Co., Ltd., St. Catherine's, Ontario.
 Leonard (E.) & Sons, London, Ontario.
 Marsh & Henthorn. Ltd., Belleville, Ontario.
 Montreal Locomotive Works, Montreal.
 Matheson (I.) & Co., New Glasgow, N.S.
 Macdonald (The) Thresher Co., Stratford, Ontario.
 Napanee Iron Works, Napanee, Ontario.
 Polson Iron Works, Toronto, Ontario.
 Robb Engineering Co., Amherst, N.S.
 Sawyer-Massey Co., Ltd., Hamilton, Ontario.
 Vulcan Iron Works, Winnipeg, Manitoba.
 Waterous (The) Engine Co., Brantford, Ontario.
 White (George) & Sons, Ltd., London, Ontario.
 Waterloo Manufacturing Company, Waterloo, Ontario.
 Western Drydock & Shipbuilding Company, Port Arthur, Ontario.

Great Britain.

Babcock & Wilcox, Ltd., London (Canadian Agency, Montreal).
 Fowler (John) & Co., Leeds, Yorkshire.
 Lubecker (The) Machine and Manufacturing Co., London, England
 Robey & Co., Limited, Lincoln, England.
 Rushton Proctor Co., Lincoln, England.
 Ransomes, Sims and Jeffries, Ltd., Ipswich.

United States.

American Hoist and Derrick Co., St. Paul, Minn.
 Aultman & Taylor Co., Mansfield, Ohio.
 Avery Co., Peoria, Ill.
 Broderick (The) Co., Muncie, Ind.
 Buffalo Steam Road Roller Co., Springfield, Ohio.
 Bucyrus Co., Ltd., Milwaukee, Wis.
 Bigelow Company, New Haven, Conn.
 Browning (The) Co., Cleveland, Ohio.
 Clyde Iron Works, Duluth, Minn.
 Case (J. I.) Threshing Co., Racine, Wis.
 Clark Engine & Boiler Co., Kalamazoo, Mich.
 Duluth Boiler Works, Duluth, Minn.
 Davenport Locomotive Works, Davenport, Iowa.
 Erie City Iron Works, Erie, Pa.
 Emerson Brantingham Co., Columbus, Ind.
 Freeman (S.) & Sons, Racine, Wis.
 Farquhar (A. B.) Co., York, Pa.

Frost Manufacturing Co., Galesburg, Ill.
 Garr, Scott Co., Richmond, Ind.
 International Boiler Works, East Stroudsburg, Pa.
 Industrial Works, Bay City, Mich.
 Johnson Bros., Ferrysburg, Mich.
 Keystone Driller Co., Beaver Falls, Pa.
 Kelly Springfield Road Roller Co., Springfield, Ohio.
 Leffe (J.) & Co., Springfield, Ohio.
 Marion Steam Shovel Co., Marion, Ohio (Canadian Agents, F. H. Hopkins & Co., Montreal).
 Muskegon Boiler Works, Muskegon.
 Minneapolis Thresher Co., Hopkins, Minn.
 Nichols & Sheppard Co., Battle Creek, Mich.
 Oil Well Supply Co., Pittsburg, Pa.
 Orr and Sambower, Reading, Pa.
 Porter (H. K.) Co., Pittsburg, Pa.
 Reeves & Co., Columbus, Ind.
 Rumley Co., La Porte, Ind.
 Schwab-Lazotte Co., Milwaukee, Wis.
 Springfield Boiler and Manufacturing Co., Springfield, Ill.
 The Browning Engineering Co., Cleveland, Ohio.
 The Thew Automatic Shovel Co., Loraine, Ohio.
 The Titusville Iron Co., Titusville, Pa.
 Union Iron Works, Erie, Pa.
 The Vulcan Iron Works Co., Wilkes-Barre, Pa.

MANUFACTURERS OF BOILER ACCESSORIES.

Canada.

Babcock & Wilcox, Ltd., Montreal, P.Q.
 Beatty (M.) & Sons, Ltd., Welland, Ontario.
 Canadian Fairbanks Co., Montreal, P.Q.
 Canadian Locomotive Works, Kingston, Ontario.
 Calgary Machinery Exchange, Calgary, Alberta.
 Engineering Specialties Co., Toronto, Ontario.
 Goldie & McCulloch Co., Ltd., Galt, Ontario.
 Jenkins Bros., Montreal, P.Q.
 Kerr Engine Company, Walkerville, Ontario.
 Leonard (E.) and Sons, Ltd., London, Ontario.
 McAvity (T.) and Sons, St. John, N.B.
 Morrison (Jas.) and Sons, Brass Mfg. Co., Toronto, Ontario.
 Niven Brothers, Lethbridge, Alberta.
 Penberthy Injector Co., Windsor, Ontario.
 Peacock Bros., Montreal, P.Q.
 Robb Engineering Co., Amherst, N.S.

Great Britain.

Blakeborough & Sons, Brighton, England.
 Glenfield & Kennedy Co., Kilmarnock, Scotland.
 Spencer (W. H.) & Company, Hitchin, England.

United States.

American Steam Gauge & Valve Co., Boston, Mass.
 Ashton Valve Co., Boston, Mass.
 Ashcroft Manufacturing Co., Chicago, Ill.
 Buckeye Iron & Brass Works, Dayton, Ohio.
 Bordo (L.*J.) Co., Philadelphia, Pa.
 Best Manufacturing Co., Pittsburgh, Pa.
 Chapman Valve Manufacturing Co., Indian Orchard, Mass.
 Case (J. I.) Threshing Machine Co., Racine, Wis.
 Crosby Steam Gauge & Valve Co., Boston, Mass.
 Crane Company, Chicago, Ill.
 David (G. M.) Regulator Co., Chicago, Ill.
 Industrial Instrument Co., Foxboro, Mass.

Huyette (P. B.) Co., Philadelphia, Pa.
(Submitted by H. L. Peller & Co., Montreal, P.Q.)
Jarecki Manufacturing Co., Erie, Pa.
Kunkle (E.B.) & Co., Fort Wayne, Ind.
Lunkenheimer Co., Cincinnati, Ohio.
Lonergan (J. E.) & Co., Philadelphia, Pa.
Marsh (J. P.) & Co., Chicago, Ill.
Nelson Valve Co., Philadelphia, Pa.
National Steam Specialties Co., Chicago.
Nathan Manufacturing Company, New York.
Ohio Brass Works, Mansfield, Ohio.
Powell (Wm.) & Co., Cincinnati, Ohio.
Pittsburg Valve Foundry & Construction Co., Pittsburg, Pa.
Roe Stephens Co., Detroit, Mich.
Schafer and Budenberg, Brooklyn, N.Y.
United States Gauge Co., New York, N.Y.
Yarnell Waring Co., Philadelphia, Pa.

Schedule of Holders of Final Certificates of Qualification under The Boilers Act.

NAME	ADDRESS	NO. OF CERT.	DATE OF ISSUE.
FIRST CLASS.			
Archibald, Harry P.	Lethbridge	*24	Aug. 15, 1900
Altham, George H.	Lethbridge	23	Apr. 8, 1908
Aitken, Robert C.	Edmonton	15	June 29, 1907
Alexander, Harry G.	Edmonton	43	Apr. 13, 1910
Adam, James C.	Lake Louise	98	Oct. 14, 1915
Brisette, Narcisse	Morinville	*15	Mar. 28, 1899
Buxton, Joseph	Calgary	*35	Aug. 29, 1901
Birkett, Holland G.	Cardston	9	Sept. 5, 1906
Briggs, Thomas L.	Calgary	10	Sept. 27, 1906
Birrell, Andrew D.	Nanton	26	Aug. 28, 1908
Banks, Henry H.	Macleod	31	Dec. 14, 1908
Broughton, John Wm.	Red Deer	34	Mar. 17, 1909
Bailey, Henry Chas.	Edmonton	50	Feb. 15, 1911
Blackburn, Robert Neale ...	Edmonton	57	Feb. 10, 1912
Brown, Robert	Lundbreck	69	Jan. 15, 1913
Penson, Frank H.	N. Edmonton	78	May 3, 1913
Baron, Harry	Diamond City	94	Mar. 26, 1915
Cross, William	Calgary	*2	Mar. 28, 1899
Cooper, Watt	Canmore	6	Aug. 11, 1906
Caldwell, Robert	Edmonton	*41	Oct. 16, 1903
Cross, Isaac E.	Ponoka	*47	Oct. 15, 1904
Cope, Cuthbert E.	Edmonton	24	Apr. 22, 1908
Christie, Alexander G.	Exshaw	19	Jan. 20, 1908
Collard, Albert N.	Moose Jaw	21	Mar. 26, 1908
Carruthers, J. A.	Calgary	51	May 26, 1911
Cunningham, Wm. J.	Calgary	62	Apr. 26, 1912
Cooke, Robert Pears	Edmonton	66	June 21, 1912
Cargill, John F.	Kipp	72	Mar. 10, 1913
Croft, William	Edmonton South	97	Sept. 28, 1915
Davidson, James	Edmonton	38	Sept. 13, 1909
Davey, Edward	Medicine Hat	44	Apr. 25, 1910
Defieux, Charles Albert ...	Edmonton	65	June 17, 1912
Dick, Archibald	Lethbridge	64	May 18, 1912
Douglas, John H. W.	Red Deer	70	Jan. 15, 1913
Downing, Augustus	Calgary	86	Apr. 21, 1914
Evans, Dan	Edmonton	*12	Mar. 28, 1899
Ewing, David	Strathcona	36	May 3, 1909
Edwards, William	Lethbridge	48	Nov. 17, 1910
Evans, Harry W.	Anthracite	80	July 10, 1913
Elderkin, Wm. W.	Calgary	91	Aug. 22, 1914
Fraser, David	Strathcona	*20	Oct. 9, 1899
Finch, Theodore S.	Raymond	5	Aug. 10, 1906
Frieman, Manfred	Lethbridge	89	June 17, 1914
Gale, Ernest A.	Calgary (dup)	29	Dec. 11, 1908
Goellnight, Leonard E.	Hillcrest	40	Mar. 30, 1910
Gray, Adam S.	Calgary	82	Nov. 19, 1913
Gray, William G.	Lethbridge	60	Mar. 14, 1912
Griffiths, Alfred J.	Macleod	68	Dec. 17, 1912
Hindmarsh, William	Calgary	41	Apr. 11, 1910
Hubbard, Sydney T.	Edmonton	*46	Apr. 18, 1904

*Indicates Certificate was granted by North-West Territories.

Schedule of Holders of Final Certificates of Qualification under
The Boilers Act.—*Continued.*

NAME	ADDRESS	NO. OF CERT.	DATE OF ISSUE.
<i>First Class.—Continued.</i>			
Heist, William E.	Edmonton	*36	Dec. 18, 1901
Hobson, Francis W.	Strathcona	*50	Apr. 1, 1905
Hill, John	Edmonton	25	June 29, 1908
Hargreaves, Thomas J.	Hillcrest	55	Sept. 9, 1911
Higgins, Alex.	Lethbridge	59	Mar. 14, 1912
Hodges, Elmer S.	Medicine Hat	73	Mar. 14, 1913
Holmes, Walter C.	Calgary	74	Apr. 21, 1913
Haddock, Sydney G.	Edmonton	71	Jan. 24, 1913
Henry, Walter F.	Mountain Park	88	Apr. 27, 1914
Isaac, William	Calgary	14	June 20, 1907
Jackson, John A.	Strathcona	*25	Oct. 23, 1900
Jones, Herbert W.	Bellevue	30	Dec. 11, 1908
Jacob, Arthur	Royal View	75	Apr. 23, 1913
Kelly, John	Edmonton (no rec'd)		Dec. 3, 1905
Kearsley, George	Edmonton	8	Sept. 5, 1906
Krammer, Frank	Calgary	93	Jan. 11, 1915
Lunn, John T.	Edmonton	*53	May 26, 1905
Le Bas, Leopold C.	Calgary	90	June 20, 1914
La Voi, Frank P.	Calgary	96	Aug. 19, 1915
Luguin, Frank G.	Calgary	101	Sept. 13, 1916
Moore, George	Frank	*55	July 21, 1905
Marshall, James Wm.	Calgary	20	Jan. 20, 1908
Marshall, Nathaniel	Edmonton	32	Feb. 7, 1909
Mudie, Alfred H.	Diamond City	54	Aug. 24, 1911
Mainwaring, John H.	Edmonton	58	Feb. 23, 1912
Murray, James H.	Bankhead	87	Apr. 21, 1914
McCall, James F.	Calgary	7	Aug. 11, 1906
McFee, Norman	Red Willow	*48	Nov. 22, 1904
McMillan, Hugh A.	Edmonton	47	Oct. 22, 1910
McMahon, William	Taber	67	Dec. 17, 1912
McCulloch, Wm. L.	Calgary	81	July 15, 1913
McLeod, Herdman	Coleman	95	Apr. 27, 1915
Niven, Robert	Lethbridge	*23	July 28, 1900
Noble, Alex. J.	Edmonton	92	Nov. 19, 1914
O'Donnell, John E.	Edmonton	37	July 5, 1909
Oliver, Ernest H.	Calgary	2	Apr. 30, 1906
Prentice, And. Weston	High River	102	Nov. 13, 1916
Ritchie, Wm. James	Canmore	4	May 15, 1906
Rice, John H.	Calgary	1	Apr. 30, 1906
Reid, Arthur	Lethbridge	39	Jan. 22, 1910
Richardson, Mathew C.	Kipp	56	Nov. 17, 1911
Ray, Arthur Robert	Edmonton	83	Dec. 17, 1913
Scott, John	Lethbridge	*14	Mar. 28, 1899
Stapely, Tobias B.	Edmonton	*45	Apr. 18, 1904
Stafford, David G.	Coleman	35	Mar. 30, 1909
Scott, James	Little	22	Apr. 7, 1908

*Indicates Certificate was granted by North-West Territories.

Schedule of Holders of Final Certificates of Qualification under
The Boilers Act.—*Continued.*

NAME	ADDRESS	NO. OF CERT.	DATE OF ISSUE.
First Class.—Continued.			
Scott, Robert	Calgary	42	Apr. 11, 1910
Simpson, William	Coleman	52	June 20, 1911
Searle, William	Coal City	53	July 13, 1911
Strom, Theodore	Calgary	63	Apr. 30, 1912
Smith, David H.	Calgary	84	Feb. 19, 1914
Stockdale, Thomas D.	Lethbridge	85	Mar. 25, 1914
Smith, Allan James	Lethbridge	99	Dec. 13, 1915
Sterling, James	Michel	100	July 15, 1916
Turgeon, Cleophas	Edmonton	*5	Mar. 28, 1899
Taylor, George R.	Strathcona	*11	Mar. 28, 1899
Turner Ornelido H.	Calgary	*34	July 1901
Tanner, Harry P.	Taber	18	Dec. 26, 1907
Todd, William	Edmonton	33	Mar. 4, 1909
Tames, Edward	Edmonton	61	Apr. 25, 1912
Taylor, Gilbert	Edmonton	79	May 3, 1913
Verdon, Joseph B.	Calgary	49	Nov. 23, 1910
Watson, Wm. D.	Bankhead	3	May 15, 1906
Watson, John T.	Calgary	13	June 7, 1907
White, E. Lionel	Calgary	12	Apr. 6, 1907
Watson, James S.	Bankhead	46	Sept. 23, 1910
White, William	Lethbridge	103	Nov. 16, 1916
SECOND CLASS.			
Anderson, C. J. B.	Calgary	*109	Feb. 7, 1901
Angus, Robert	Angus Ridge	*160	Oct. 2, 1901
Alderson, Robert	Coleman	126	Apr. 22, 1908
Adair, Fred D.	Edmonton	30	May 10, 1906
Allworth, E. Mortimer	Okotoks	81	June 19, 1907
Anderson, Andrew	Calgary	208	Aug. 15, 1910
Aitken, David	Lethbridge	212	Sept. 12, 1910
Antrobus, William	Edmonton	260	Nov. 17, 1911
Aitken, James	Lethbridge	341	Mar. 10, 1913
Adamson, Frederick J.	Coalhurst	363	Dec. 16, 1913
Abraham, W. R.	Lacombe	410	Jan. 11, 1915
Andhal, Theo. J.	Redcliff	436	Apr. 11, 1916
Antroves, James	Pocahontas	437	Apr. 13, 1916
Brisette, Louis	Morinville	193	Apr. 13, 1910
Bradden, Wm. T.	Strathcona	194	Apr. 13, 1910
Biamonte, Antonio	Edmonton	329	Nov. 23, 1912
Brice, Henry B.	Calgary	207	Aug. 8, 1910
Baytinheimer, George H. ..	Red Deer	*7	Sept. 4, 1899
Elery, Charles	Strathcona	*32	Mar. 9, 1900
Blatchford, K. A.	Edmonton	*88	Oct. 23, 1900
Blain, J. W.	Strathcona	*106	Dec. 31, 1900
Bannerman, James A.	Red Deer	*162	Dec. 18, 1901
Brownlow, Henry A.	Lacombe	*163	Dec. 23, 1902
Brewster, W. A.	Edmonton	*195	May 13, 1903
Bowden, H. S.	Strathcona	*198	May 13, 1903
Ballantyne, Robert	Calgary	*229	Mar. 14, 1904
Barnhouse, William	Edmonton	*244	May 26, 1904
Burkholder, Henry J.	Strathcona	*267	Oct. 15, 1904

*Indicates Certificate was granted by North-West Territories.

Schedule of Holders of Final Certificates of Qualification under
The Boilers Act.—*Continued.*

NAME	ADDRESS	NO. OF CERT.	DATE OF ISSUE.
<i>Second Class.—Continued.</i>			
Beamish, Crandell	Didsbury	118	Apr. 22, 1908
Bentley, Emerson D.	Medicine Hat	17	Apr. 11, 1906
Burger, M. E.	Strathcona	2	Sept. 18, 1905
Baird, James B.	Red Deer	116	Apr. 14, 1908
Bryson, William J.	Medicine Hat	178	Dec. 4, 1909
Blair, William	Lille	25	Apr. 30, 1906
Berry, Stephen	Taber	127	Apr. 22, 1908
Brill, George	Red Deer	161	Aug. 24, 1909
Brown, David	Calgary	75	May 4, 1907
Bruce, George	Lethbridge	114	Apr. 8, 1908
Bagley, William S.	Edmonton	156	June 18, 1909
Broadwell, Amos	Pincher Creek	170	Sept. 24, 1909
Bailey, Douglas A.	Calgary	173	Oct. 22, 1909
Brenton, Charles J.	Edmonton	234	Apr. 1, 1911
Bratz, Emil	Pincher Creek	272	Dec. 19, 1911
Brooks, Fred	Edmonton	259	Nov. 10, 1911
Bailey, W. Edgar	Lethbridge	273	Dec. 19, 1911
Bodard, Alcide	Edmonton	312	Aug. 12, 1912
Bever, Otto R.	Diamond City	296	May 18, 1912
Beadle, Elkanah William ...	Edmonton	320	Sept. 25, 1912
Buchanan, Wm. E.	Nanton	353	May 15, 1913
Brennan, Fred	Edson	346	Apr. 7, 1913
Blix, John A.	Calgary	349	Apr. 21, 1913
Burchell, James	Edmonton	340	Mar. 7, 1913
Barker, John H.	Edmonton	355	June 21, 1913
Bronsema, Emanuel	Edmonton	385	Mar. 7, 1914
Barnott, Edward	Edmonton	402	Sept. 30, 1914
Butchart, Wm. Robert	Hayter	371	Mar. 18, 1914
Bradshaw, Alfred	Calgary	418	Apr. 23, 1915
Bucknam, Artliff V.	Edmonton	432	Feb. 14, 1916
Brown, Thomas	Hillcrest	457	Dec. 11, 1916
Burford, Fred G.	Medicine Hat	499	Aug. 16, 1916
Cope, Edmund G. M.	Lethbridge	*1	June 30, 1899
Conn, David	Lethbridge (dup) ...	181	Jan. 19, 1910
Chalmers, Walter N.	Edmonton	*51	May 28, 1900
Cullen, James E.	Calgary	*115	Feb. 20, 1901
Converse, Stephen J.	Ponoka	*192	Mar. 6, 1903
Clifford, Robert A.	Strathcona	*197	May 13, 1903
Chapman, A. B.	Red Deer	*239	Apr. 18, 1904
Callery, Frederick	Calgary (dup)	150	Nov. 10, 1908
Coggan, Frank D.	Calgary	72	June 3, 1907
Cousins, Arthur	Calgary	24	Apr. 30, 1906
Crawford, Samuel L.	Strathcona	52	Oct. 25, 1906
Card, Caleb A.	Red Deer	53	Nov. 2, 1906
Currie, James J.	Calgary	110	Mar. 23, 1908
Cadwell, Theophilus	Calgary	105	Jan. 20, 1908
Cranston, Adam	Calgary	55	Jan. 22, 1907
Clinton, Otto M.	Edmonton	79	June 14, 1907
Collins, Fred M.	Frank	88	July 16, 1907
Campbell, Mal. L.	Earlsville	96	Oct. 28, 1907
Cowall, Cedric A.	Red Deer	100	Dec. 5, 1907
Calder, Hector J.	Calgary	112	Mar. 23, 1908
Carr, Alva B.	Edmonton (dup.)	203	June 2, 1910
Cutting, Charles	Vermilion	130	May 7, 1908

*Indicates Certificate was granted by North-West Territories.

Schedule of Holders of Final Certificates of Qualification under
The Boilers Act.—*Continued.*

NAME	ADDRESS	NO. OF CERT.	DATE OF ISSUE.
<i>Second Class.—Continued.</i>			
Collard, George Lewis	Medicine Hat	152	Jan. 18, 1909
Carpenter, Wilfred	Frank	188	Mar. 25, 1910
Cruickshanks, George	Lethbridge	185	Mar. 15, 1910
Commeysne, Florent	Edmonton	300	May 29, 1912
Candlish, William	N. Edmonton	281	Feb. 23, 1912
Craig, Hugh S.	Calgary	321	Sept. 28, 1912
Clark, Gordon	Edmonton S.	352	May 3, 1913
Costain, John H.	Edmonton	335	Feb. 12, 1913
Chapman, Harold	Carmanagay	237	Feb. 19, 1913
Cameron, Walter R.	Grande Prairie	344	May 15, 1913
Cormier, Henry O.	Wetaskiwin	386	May 7, 1914
Claringbauld, Chas. A. G. ..	Millet	404	Oct. 19, 1914
Clark, James A.	Gainford	412	Feb. 12, 1915
Cockle, Hubert	Cummings	429	Dec. 13, 1915
Crawford, James	Camrose	455	Oct. 28, 1916
Dozey, Charles	Frank	218	Sept. 16, 1910
Duncombe, Walter	Taber	217	Sept. 16, 1910
Donaldson, Maxwell	Lethbridge (dup.) ...	182	Jan. 19, 1910
Doughty, James	Calgary	*143	July 25, 1901
Dresser, Bertram W.	Wetaskiwin	*261	Oct. 15, 1904
Drader, John A.	Pincher Creek	*290	Dec. 30, 1904
Dean, David	Calgary	*298	Mar. 16, 1905
Drees, Max L.	Edmonton (dup.) ...	*269	Nov. 30, 1905
Danner, Clifford	Lacombe	22	Apr. 25, 1906
Duncan, Andrew, Sr.	Edmonton	129	May 7, 1907
Dick, Wm.	High River	57	Jan. 14, 1907
Duncan, Andrew, Jr.	Edmonton	139	Sept. 18, 1908
Dunbar, Henry C.	Edmonton	123	Apr. 22, 1908
Donaldson, Samuel	Lethbridge	164	Sept. 15, 1909
Daley, William	Strathcona	163	Aug. 27, 1909
Dowsett, Nathaniel	Frank	228	Mar. 7, 1911
Davies, Samuel	Elcan	274	Dec. 19, 1911
Davidson, Eric	Calgary	298	May 22, 1912
Davis, John B.	Edmonton	362	Nov. 11, 1913
Dodd, James	Edmonton	256	Aug. 2, 1913
Drummond, John W.	Calgary	354	May 19, 1913
Duffy, James T.	Strathmore	380	Apr. 21, 1914
Defleux, Osmond Terence ..	Edmonton S.	422	May 7, 1915
Dennison, John Reid	Banff	426	Nov. 19, 1915
David, James R.	Vegreville	441	Apr. 25, 1916
Dearden, Siamon	Calgary	434	Mar. 16, 1916
Davy, Stuart C.	Bassano	450	Sept. 14, 1916
Davis, Harry O.	Edmonton	453	Oct. 24, 1916
Dickenson, Arthur	Evansburg	433	Feb. 14, 1916
Emery, Ray C.	Strathcona	*264	Oct. 15, 1904
Evans, William	Frank	7	Sept. 18, 1905
Eby, Josiah S.	Didsbury	95	Oct. 24, 1907
Evans, George A.	Raymond	209	Aug. 30, 1910
Edmonds, Thomas J.	Edmonton	231	Mar. 20, 1911
Eldridge, James Thomas ...	Passburg	285	Mar. 19, 1912
Ellis, John W.	Edmonton	406	Nov. 19, 1914
Emmericks, John J.	Gleichen	374	Apr. 6, 1914
Emberston, Julius A.	Edmonton	369	Feb. 16, 1914

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Schedule of Holders of Final Certificates of Qualification under
The Boilers Act.—*Continued.*

NAME	ADDRESS	NO. OF CERT.	DATE OF ISSUE.
<i>Second Class.—Continued.</i>			
Finch, Robert H.	Calgary	*184	Oct. 10, 1902
Fraser, William	Strathcona	*265	Oct. 18, 1904
Frame, James F.	Lethbridge	*219	Oct. 6, 1903
Fraser, Charles	Okotoks	397	July 31, 1914
Fleetwood, Howard A.	Edmonton	*262	Oct. 15, 1904
Fisk, James George	Fort Saskatchewan ..	*307	Apr. 14, 1905
Faulkner, Jos. W.	Landbreck	42	Aug. 11, 1906
Flan, James Robert	Calgary	85	July 16, 1907
Foote, William	Pincher Creek	87	July 16, 1907
Foster, John Thomas	Calgary	97	Nov. 14, 1907
Foster, Riley	Magrath	297	May 18, 1912
Ferguson, Llewellyn W.	Strathcona	301	June 28, 1912
Fabian, Henry B.	Tofield	311	July 23, 1912
Ferguson, Ernest G.	Fort Saskatchewan ..	383	Apr. 27, 1914
Fennell, Wm. H.	Calgary	396	July 18, 1914
Fidler, John J.	Calgary	451	Sept. 26, 1916
Forbes, John	Edmonton	430	Jan. 10, 1916
Forsythe, Marshall A.	Bankhead	443	Apr. 27, 1916
Grieve, David	Calgary	*111	Feb. 7, 1901
Griffiths, W. H.	Anthracite	31	May 14, 1906
Garneau, Alexander	Strathcona	*266	Oct. 15, 1904
Grieve, William	Calgary	*276	Oct. 28, 1904
Gibbs, Morley C.	Calgary	297	Mar. 16, 1905
Ginter, William C.	Edmonton	18	Apr. 11, 1906
Garner, Anthony	Bankhead	33	May 14, 1906
Godson, William	Bankhead	83	June 26, 1907
Good, William	Calgary	134	Aug. 6, 1908
Going, Philip S.	Mountain View	238	Apr. 24, 1911
Graves, James H.	Calgary	229	Mar. 7, 1911
Grant, Alex.	Calgary	250	Sept. 8, 1911
Galloway, Alex.	Medicine Hat	361	Oct. 10, 1913
Going, Ernest M.	Mountain View	290	Apr. 16, 1912
Gleaves, George N.	Medicine Hat	314	Aug. 14, 1912
Gourley, Fred R.	Strathcona	316	Aug. 26, 1912
Gretlum, Clarence	Bawlf	376	Apr. 16, 1914
Gleeson, Nathan C.	Red Deer	368	Jan. 13, 1914
Green, John Henry	Bellevue	439	Apr. 14, 1916
Hennegar, Ed. J.	Edmonton	*19	Oct. 2, 1899
Haines, Alfred H.	Edmonton	*33	Mar. 7, 1900
Hillis, Henry	Medicine Hat	*42	Mar. 23, 1900
Hicklik, John W.	Calgary	*79	Sept. 29, 1900
Hiscon, Thomas S.	Lethbridge	*85	Sept. 29, 1900
Howell, Edward	Battleford	*137	May 30, 1901
Hillis, Thomas	Lethbridge	*172	Aug. 18, 1902
Henneg, Michael	Calgary	*183	Oct. 10, 1902
Heatley, William	Beaumont	*274	Oct. 4, 1904
Henry, Charles	Strathcona	*234	Apr. 18, 1904
Hutchings, H. E.	Edmonton	*306	Mar. 31, 1905
Hackey, Thomas H.	Evarts	117	Apr. 14, 1908
Harper, William H.	Lloydminster	10	Nov. 16, 1906
Heacock, James H.	Calgary	71	June 3, 1906
Hay, George Porter	Pincher Creek	44	Aug. 11, 1906
Howe, William Ed.	Sunny Slope	49	Sept. 8, 1906
Hendry, William A.	Edmonton	64	May 15, 1906

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**Schedule of Holders of Final Certificates of Qualification under
The Boilers Act.—Continued.**

NAME	ADDRESS	NO. OF CERT.	DATE OF ISSUE.
<i>Second Class.—Continued.</i>			
Harris, Samuel D.	Red Deer	62	May 7, 1907
Harris, V. H.	Red Deer	63	May 7, 1907
Hockin, John	Edmonton	91	Oct. 15, 1907
Hill, John	Strathcona	131	May 18, 1908
Hill, Marshall	Macleod	189	Mar. 21, 1910
Hilton, William H.	Taber	213	Sept. 12, 1910
Howard, Ernest E.	Conjuring Creek	201	June 1, 1910
Horn, James	Lethbridge	187	Mar. 15, 1910
Holford, Joseph C.	Lac Ste Anne	206	July 29, 1910
Henderson, Norman	Bellevue	230	Mar. 11, 1911
Hope, George	Royal View	286	Mar. 18, 1912
Holmes, George E.	Gleichen	351	Apr. 21, 1913
Hodginsons, Ernest G.	Calgary	350	Apr. 21, 1913
Hardy, David T.	Lethbridge	365	Jan. 12, 1914
Hawkes, William	Edmonton	420	Apr. 27, 1915
Hawkins, James Franklin ..	Red Deer	416	Apr. 16, 1915
Irwin, Lester J.	Strathcona	*270	Oct. 15, 1904
Irving, Albert E.	Calgary	56	Jan. 22, 1907
Irvine, Alexander	Calgary	165	Sept. 15, 1909
Inglis, George	Edmonton	266	Dec. 12, 1911
Innes, James L.	Edmonton	309	Dec. 17, 1914
Judd, David H.	Calgary	*161	Oct. 5, 1901
Jarratt, Edward	Strathcona	*263	Oct. 15, 1903
Jackson, James O.	Inga	60	Apr. 8, 1907
Johnson, Pontus	Lewisville	235	Apr. 5, 1911
Jack, William	Bassano	246	June 30, 1911
Jones, Joseph S.	Ponoka	347	June 17, 1913
Johnston, Albert J.	Calgary	381	Apr. 21, 1914
James, John	Elcan	372	Mar. 24, 1914
Johnston, Harry R.	Edmonton	384	Apr. 28, 1914
Jones, Thomas Sutton	Calgary	427	Nov. 20, 1915
Kerr, William	Lethbridge (dup.) ...	183	Jan. 19, 1910
Kidd, Frederick	Calgary	62	June 14, 1900
Kowalczyck, Antoine	St. Paul des Metis...	*114	Feb. 16, 1900
Kadlec, J. J.	Wetaskiwin	*236	Apr. 18, 1904
Killam, Robert C.	Red Deer	65	May 20, 1907
Keith, Edward C.	Lille	226	Dec. 8, 1910
Livingstone, James C.	Lethbridge	214	Sept. 12, 1910
Lang, James	Okotoks	*301	Mar. 17, 1905
Lacey, William R.	Calgary	*182	Oct. 10, 1902
Lamb, Herb. David	Frank	41	Aug. 11, 1906
LeBreton, Gustav A.	Edmonton	*308	Apr. 14, 1905
Lang, John	Okotoks	45	Oct. 11, 1906
Laut, John R.	Crossfield	153	Apr. 6, 1909
Lavelle, Patrick	Exshaw	149	Oct. 30, 1908
Lewis, John H.	Lethbridge	166	Sept. 15, 1909
Langstroth, Alf.	Calgary	240	May 5, 1911
Lord, Victor H.	Diamond City	244	May 26, 1911
Letcher, Richard	Hillcrest	255	Oct. 24, 1911
Libbey, Malcolm M.	Edmonton	271	Dec. 15, 1911
Laundry, Harry	Edmonton	325	Nov. 6, 1912

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Schedule of Holders of Final Certificates of Qualification under
The Boilers Act.—*Continued.*

NAME	ADDRESS	NO. OF CERT.	DATE OF ISSUE.
<i>Second Class.—Continued.</i>			
Large, Eugene	Frank	343	Mar. 14, 1913
Lane, Conrad M.	Edmonton	392	June 22, 1914
Leec, James Edward	Edmonton	425	Oct. 13, 1915
Moran, Austin	Lethbridge	36	Mar. 23, 1900
Marshall, Fred Jos.	Kamloops, B. C.	*203	Aug. 14, 1903
Morrison, John C.	Gleichen	*214	Sept. 24, 1903
Mortimer, Samuel M.	Strathcona	*241	May 26, 1904
Murray, Robinson	Calgary	104	Jan. 20, 1908
Meeres, Horace	Red Deer	93	Oct. 22, 1907
Mjolness, John A.	Medicine Hat	16	Apr. 11, 1906
Mauland, Jack	Bankhead	99	Dec. 5, 1907
Morrison, Kenneth	Coleman	20	Apr. 19, 1906
Mair, Robert B.	Strathcona	37	Aug. 8, 1906
Morgan, Thomas M.	High River	38	Aug. 7, 1906
Moore, William A.	Red Deer	137	Aug. 13, 1908
Mueller, Karl F.	Lethbridge	333	Feb. 11, 1913
Munro, Claud	Lethbridge	317	Sept. 17, 1912
Morton, Wm. Johnston	Edmonton	308	June 28, 1912
Markle, Wilbert H.	Calgary	332	Jan. 15, 1913
Macklin, John	Lethbridge	394	July 10, 1914
Maxwell, James	Edson	379	Apr. 17, 1914
Marshall, John H.	Calgary	401	Sept. 21, 1914
Miller, John	Diamond City	415	Feb. 23, 1915
Mulligan, Jos.	Canmore	445	May 16, 1916
Machin, Wm. S.	Coleman	431	Jan. 13, 1916
Mathie, John	Pincher Creek	452	Oct. 20, 1916
McKay, Daniel	Lethbridge	*4	June 30, 1899
McGee, Thomas	White Fish L. (dup.) ..	113	Mar. 28, 1908
McConnell, Wm. J.	Lethbridge	*	Oct. 8, 1903
McIntyre, John	Calgary (dup.)	48	Aug. 16, 1906
McKim, Nelson	Edmonton	14	Mar. 26, 1906
McClafflin, W. G.	Ponoka	*237	Apr. 18, 1904
McCardia, Samuel	Edmonton	78	June 14, 1907
McLean, Frederick A.	Edmonton	*305	Mar. 31, 1905
McNeilly, S.	Okotoks	107	Mar. 23, 1908
McDonald, Simon	Frank	15	Mar. 28, 1906
McDonald, E. R.	Edmonton	120	Apr. 22, 1908
McDonald, Alex.	Edmonton	119	Apr. 23, 1908
McDonald, John D.	Hillcrest	61	Apr. 18, 1907
McNeill, Neil S.	Calgary	68	May 23, 1907
McKinnon, Alex. J.	Lille	82	June 20, 1907
McIntyre, Joseph	Taber	84	July 8, 1907
McGregor, John	Hillcrest	90	Sept. 26, 1907
McNichol, John	Exshaw	103	Jan. 3, 1908
McFayden, John C.	Edmonton	124	Apr. 22, 1908
McIndoe, William	Calgary	136	Aug. 6, 1908
McDonald, John	Lille	172	Oct. 5, 1909
McNair, Arod N.	Lethbridge	175	Nov. 13, 1909
Melvor, Wm. K.	Edmonton	196	Apr. 13, 1910
McAffer, Ronald	Medicine Hat	221	Sept. 24, 1910
McKenzie, Norman	Calgary	242	May 20, 1911
McKenzie, Harvey K.	Lethbridge	275	Dec. 19, 1911
McDonald, John A.	Calgary	327	Nov. 13, 1912

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Schedule of Holders of Final Certificates of Qualification under
The Boilers Act.—*Continued.*

NAME	ADDRESS	NO. OF CERT.	DATE OF ISSUE.
<i>Second Class.—Continued.</i>			
McAuley, Gus Wallace	Coleman	326	Nov. 13, 1912
McPhail, John	Bellevue	390	May 13, 1914
McLeod, Fraser	Diamond City	395	July 10, 1914
McPhee, Murdoch	Edmonton	366	Jan. 12, 1914
McLean, Myron C.	Ponoka	405	Oct. 19, 1914
McConnell, James	Drumbeller	375	Apr. 6, 1914
McLean, Keith	Edmonton	403	Oct. 15, 1914
McGillivray, Colin	Lille	176	Nov. 13, 1909
Nimmons, Robert	Lethbridge	*38	Mar. 23, 1900
Nicholson, Robert John	Edmonton	67	May 20, 1907
Nuttall, Reginald	Edmonton	291	Apr. 25, 1912
Nothwang, Geo. K.	Edmonton	377	Apr. 16, 1914
Neill, Ernest R.	Edmonton	398	Aug. 10, 1914
Oxley, John	Taber	6	Sept. 18, 1905
Olson, Harold P. T.	Calgary	276	Dec. 28, 1911
O'Neil, Edward T.	Edmonton	319	Sept. 20, 1912
Oliver, Alonzo	Edmonton	336	Feb. 12, 1913
Orr, Fred	Canmore	373	Mar. 27, 1914
Olson, Olaf	Mountain Park	442	Apr. 25, 1916
Parcels, Timothy P.	Red Deer	*6	Sept. 4, 1899
Payzant, Ernest M.	Edmonton	*12	Oct. 9, 1899
Fratt, George	Edmonton	*16	Oct. 9, 1899
Pearce, Abraham	Edmonton	*52	May 28, 1900
Fugh, John	Calgary	28	Apr. 30, 1906
Powers, Thomas E.	Strathcona	*246	May 26, 1904
Potter, Martin	Evarts	447	July 19, 1916
Punnett, Lewis L.	Chesterwold	50	Oct. 4, 1906
Pallot, Herbert J.	Edmonton	144	Sept. 28, 1908
Fayzont, H. C.	Edmonton	456	Oct. 30, 1916
Frice, John	Edmonton	54	Dec. 19, 1906
Patterson, John M.	Okotoks	108	Mar. 23, 1908
Prince, John E.	Calgary	76	June 4, 1907
Purvis, John	Calgary	106	Feb. 15, 1908
Pollock, Daniel R.	Calgary	151	Dec. 2, 1908
Pearson, Augustus	Bellevue	210	Sept. 7, 1910
Potter, John	Calgary	184	Mar. 7, 1910
Pitts, Wm. S.	Edmonton	180	Jan. 10, 1910
Pallot, Harold E.	Edmonton	191	Apr. 6, 1910
Payne, George	Lethbridge	223	Oct. 20, 1910
Petrie, Robert F.	Elcan	219	Sept. 16, 1910
Patterson, Samuel	Granum	254	Oct. 18, 1911
Pollitt, Nicholas T.	Taber	247	July 13, 1911
Pearce, William C.	Edmonton	249	Aug. 24, 1911
Pollock, Frederick	Edmonton	253	Sept. 9, 1911
Palmer, John C.	Edmonton	262	Nov. 28, 1911
Paterson, J. Anderson	Edmonton	263	Nov. 29, 1911
Parken, Joseph	Carmen	288	Apr. 4, 1912
Parsons, Alfred J.	Royal City	318	Sept. 17, 1912
Pfitzeumier, Herman	Stettler	407	Nov. 19, 1914
Patrick, David	Edmonton South	421	Apr. 27, 1915
Prentice, A. Weston	High River	414	Feb. 23, 1915
Pearson, Vernon	Canmore	435	Mar. 16, 1916

*Indicates Certificate was granted by North-West Territories.

Schedule of Holders of Final Certificates of Qualification under
The Boilers Act.—Continued.

NAME	ADDRESS	NO. OF CERT.	DATE OF ISSUE.
Second Class.—Continued.			
Penn, John S.	Hillcrest	446	May 16, 1916
Pennycook, William H.	Pocahontas	438	Apr. 12, 1916
Reed, R. W.	Lethbridge	*5	June 30, 1899
Richards, Henry John	Canmore	*30	Feb. 13, 1900
Rankin, Thomas Henry	Banff	*77	Sept. 29, 1900
Roberts, William B.	Fort Saskatchewan	*235	May 18, 1904
Ritchie, William A.	Calgary	141	Sept. 22, 1908
Rich, John H.	Calgary	69	June 3, 1907
Relton, Ole	Lethbridge	115	Apr. 8, 1908
Riddell, Arthur	Calgary	140	Sept. 22, 1908
Rice, Robert	Calgary	222	Oct. 11, 1910
Richardson, Thomas	Calgary	220	Sept. 23, 1910
Rennie, Thomas	Millet	265	Dec. 8, 1911
Ross, Dexter A.	Strathcona	306	June 28, 1912
Ryan, Harry	Frank	313	Aug. 12, 1912
Richardson, Ernest	Calgary	299	May 22, 1912
Rush, Clyde E.	Burns	338	Feb. 19, 1913
Ronaghan, Albert H.	Vermilion	378	Apr. 16, 1914
Robin, Victor E.	Edson	367	Jan. 12, 1914
Ray, Thomas J. S.	Calgary	399	Aug. 22, 1914
Schatz, William H.	Strathcona	*17	Oct. 9, 1899
Shaw, M. W. S.	Midnapore	*27	Dec. 1, 1899
Stafford, George	Lethbridge	160	Aug. 20, 1909
Steven, Hutton	Calgary	*43	Apr. 17, 1900
Stagg, George	Calgary	*112	Feb. 7, 1901
Steven, Alfred E.	Calgary	*113	Feb. 7, 1901
Shelley, Henry James	Calgary	*116	Mar. 12, 1901
Sloan, William	Lethbridge	*169	July 30, 1902
Siemens, Peter	Anthracite	34	May 14, 1906
Stewart, John A.	Red Deer	12	Jan. 2, 1906
Shannon, James	Calgary	*223	Nov. 6, 1903
Shackleton, Thos. A.	Kamloops	*234	Nov. 14, 1903
Starkey, George L.	Ponoka	9	Nov. 2, 1905
Stokes, Robert D.	Strathcona	19	Apr. 11, 1906
Stacey, Frederick H.	Edmonton	1	Sept. 18, 1905
Shore, John P.	Edmonton	3	Sept. 18, 1905
Slingsby, Sidney	Calgary	74	June 3, 1907
Stanley, Charles H.	Bankhead	32	May 14, 1906
Sefton, Frederick	Lethbridge	39	Aug. 10, 1906
Stanley, Benj. F.	Calgary	47	Aug. 14, 1906
Syer, Thomas M.	Red Deer	94	Oct. 22, 1907
Sparber, Charles H.	Lethbridge	177	Nov. 24, 1909
Simondson, Henry	Northern	197	Apr. 13, 1910
Smith, Frederick	Coleman	215	Sept. 12, 1910
Schaumleffel, Clifford C. ..	Lloydminster	192	Apr. 6, 1910
Steven, John C. S.	Edmonton	204	June 22, 1910
Smith, Wm. J.	Milk River	370	Mar. 17, 1914
Scott, David S.	Coleman	256	Oct. 24, 1911
Simpson, John T.	Coleman	252	Sept. 8, 1911
Sinclair, Walter W. P.	Medicine Hat	236	Apr. 12, 1911
Saunders, Michael J.	Cardiff	267	Dec. 12, 1911
Seymour, Francis E.	Macleod	257	Oct. 24, 1911
Stobbs, John	Lethbridge	251	Sept. 9, 1911
Sowerby, William N.	Taber	258	Oct. 24, 1911

*Indicates Certificate was granted by North-West Territories.

Schedule of Holders of Final Certificates of Qualification under
The Boilers Act.—*Continued.*

NAME	ADDRESS	NO. OF CERT.	DATE OF ISSUE.
<i>Second Class.—Continued.</i>			
Stephenson, John Leach	Lethbridge	239	Apr. 24, 1911
Stephenson, Harry	Medicine Hat	245	June 20, 1911
Singer, William George	Edmonton	270	Dec. 12, 1911
Stirling, James	Michel	287	Mar. 18, 1912
Spargo, John	Edmonton	277	Jan. 12, 1912
Stratton, Claude	Edmonton	310	July 22, 1912
Shaw, Thomas	Edmonton	295	May 14, 1912
Shaw, Oliver E.	Lethbridge	339	Feb. 19, 1913
Smith, Ekin H.	Edmonton	358	Sept. 25, 1913
Shearer, Arthur	Hillcrest	408	Mar. 20, 1914
Sherret, Charles	Lethbridge	391	June 17, 1914
Scarr, Claude J.	Bankhead	400	Aug. 22, 1914
Smith, Clarence	Edmonton	388	May 7, 1914
Stone, William	Calgary	419	Apr. 23, 1915
Spence, John K.	Edmonton	428	Dec. 10, 1915
Stephen, James	Edmonton	454	Oct. 24, 1916
Stockett, Thomas R.	Strathmore	444	Apr. 27, 1916
Tabacchi, Stephen	Lethbridge	186	Mar. 15, 1910
Toreson, Thomas	Wetaskiwin	*31	Mar. 7, 1900
Thompkins, Peter	White Fish Lake	*98	Nov. 27, 1900
Tasker, Henry A.	Nanton	148	Oct. 15, 1908
Taddrew, Henry P.	Edmonton	29	May 10, 1906
Turner, Duncan	Edmonton	98	Nov. 26, 1907
Thorley, James	Taber	101	Dec. 26, 1907
Turner, Stephen F.	Taber	102	Dec. 26, 1907
Terry, Frank A.	Strathcona	171	Sept. 29, 1909
Taylor, Percy E.	Taber	145	Oct. 6, 1908
Thompson, James	Innisfail	162	Aug. 24, 1909
Turner, James Abbott	Taber	304	June 28, 1912
Thomas, David Rees	Lethbridge	228	Nov. 13, 1912
Todd, William	Edmonton	357	Aug. 21, 1913
Thompson, John	Edmonton South	393	June 22, 1914
Thompson, Andrew J.	Lethbridge	423	Aug. 19, 1915
Thomson, John F.	Bellevue	417	Apr. 20, 1915
Tupper, Leon H.	St. Albert	345	Mar. 26, 1913
Thompson, Chas.	Red Deer	448	July 21, 1916
Tollestrup, Rudolph W.	Raymond	440	Apr. 14, 1916
Von Wendel, Carl	Calgary	*222	Nov. 6, 1903
Van Haast, Julius H.	Strathcona	*278	Nov. 5, 1904
Voss, Edwin E.	Fort Saskatchewan	128	May 7, 1908
Vincent, Robert G.	Blairmore	155	May 26, 1909
Varden, Anthony L.	Edmonton	158	July 5, 1909
Von Keekem, Barend J.	Medicine Hat	237	Apr. 12, 1911
Vaughan, Wm. Lyle	Calgary	243	May 20, 1911
Varlow, Henry John	Edmonton	268	Dec. 12, 1911
Vincent, Robert Wesley	Coleman	424	Sept. 15, 1915
Walker, J. B.	Lethbridge	*3	June 30, 1899
White, James	Canmore	*73	Sept. 5, 1900
Websdale, Francis	Edmonton	*138	June 21, 1901
Waldock, John G.	Medicine Hat	*170	Aug. 18, 1902
Waddell, O. S.	Edmonton	*245	May 26, 1904
Wright, George W.	Calgary	73	June 3, 1907
Wilcox, James E.	Coleman	125	Apr. 22, 1908

*Indicates Certificate was granted by North-West Territories.

Schedule of Holders of Final Certificates of Qualification under
The Boilers Act.—*Continued.*

NAME	ADDRESS	NO. OF CERT.	DATE OF ISSUE.
Second Class.—Continued.			
Williams, John	Edmonton	23	Apr. 30, 1906
Wilson, R. J.	High River	80	June 19, 1907
Webb, James F.	Exshaw	143	Sept. 22, 1908
Wilkinson, Robert	Calgary	142	Sept. 22, 1908
Walker, Rolf E.	Edmonton	205	July 16, 1910
Warr, Percy J. H.	Lethbridge	227	Dec. 8, 1910
Winter, Archibald	Strathcona	202	June 1, 1910
Walton, John W.	Edmonton	233	Mar. 31, 1911
Willis, Robert J.	Edmonton	269	Dec. 12, 1911
Ward, John	Edmonton	330	Dec. 13, 1912
Wood, James	Bellevue	279	Jan. 16, 1912
Will, Frank Silver	Edmonton	284	Mar. 14, 1912
Williams, Richard	Medicine Hat	289	Apr. 6, 1912
White, William	Lethbridge	305	June 28, 1912
Weir, John	Edmonton	307	June 28, 1912
Warburton, John	Spring Point	359	Oct. 17, 1913
Watson, Frederick	Bankhead	364	Dec. 17, 1913
Wright, Thomas	Calgary	342	Mar. 14, 1913
Weston, Thomas W.	Hillcrest	389	May 7, 1914
Wentz, Earl R.	Medicine Hat	382	Apr. 29, 1914
Walker, Robert B.	Edmonton South	411	Jan. 11, 1915
Walker, Thomas	Coleman	413	Feb. 15, 1915
Young, George	Lille	43	Aug. 11, 1906
Zurlinder, John	Calgary	138	Sept. 14, 1908
THIRD CLASS.			
Albertson, Andrew O.	Strathcona	*135	June 25, 1901
Aikman, George	Calgary	*274	Sept. 11, 1902
Allan, Albert	Edmonton	*360	May 13, 1903
Allan, Arthur	Edmonton	*526	Apr. 18, 1904
Ascroft, Joseph	Lethbridge	*673	Nov. 24, 1904
Akey, Charles S.	Iowalta	*759	Mar. 24, 1905
Archibald, Chester H.	Wetaskiwin	2722	Apr. 16, 1914
Ambler, David	Wetaskiwin	*790	Mar. 27, 1905
Anderson, Andrew Wm.	Wetaskiwin	*794	Mar. 27, 1905
Adair, James E.	Edmonton	2052	Feb. 29, 1912
Agar, Charles	Edmonton	143	May 29, 1906
Adshead, Herb. B.	Olds	149	May 31, 1906
Anderson, J.	Stavely	192	Aug. 13, 1906
Alexander, J. A.	Livingstone	203	Aug. 13, 1906
Adams, David C.	Edmonton	207	Sept. 8, 1906
Auld, John	Edmonton	266	Apr. 30, 1907
Anderson, G. A.	Bowden	218	May 29, 1907
Anderson, James J.	Crossfield	324	May 29, 1907
Anstett, Frank A.	Langdon	337	June 4, 1907
Andrews, W. H.	Stewartwyn	364	June 7, 1907
Adams, Charles W.	Lacombe	367	June 7, 1907
Anderson, Henry	Rosenroll	393	June 14, 1907
Anderson, William	Killam	399	June 14, 1907
Anderson, Ed. A.	Heatherbrae	402	June 14, 1907
Ambler, George D.	Wetaskiwin	411	June 14, 1907
Allan, Harold	Calgary	563	Jan. 20, 1908
Archibald, Syl. C.	Ferry Bank	691	May 5, 1908

*Indicates Certificate was granted by North-West Territories.

Schedule of Holders of Final Certificates of Qualification under
The Boilers Act.—*Continued.*

NAME	ADDRESS	NO. OF CERT.	DATE OF ISSUE.
<i>Third Class.—Continued.</i>			
Alveberry, Fred S.	Wetaskiwin	699	May 7 1908
Atterbury, Charles J.	Edmonton	773	Sept. 18, 1908
Asper, A.	Merna	782	Sept. 18, 1908
Ashcroft, John	Lethbridge	844	Oct. 6, 1908
Anderson, Aitken McK.	Calgary	881	Mar. 19, 1909
Adring, Tom	Lethbridge	898	Mar. 24, 1909
Atkins, Ralph P.	New Dayton	899	Mar. 24, 1909
Aveldson, August	Sunny Slope	906	Mar. 26, 1909
Annabel, Bolton A.	Claresholm	965	Apr. 16, 1909
Anderson, Edward	Sterling	988	Apr. 20, 1909
Aldridge, Oliver	Cardston	2119	Apr. 2, 1912
Arrison, Orrin S.	Gleichen	1017	Apr. 28, 1909
Anderson, Orile H.	Sterling	1109	Sept. 15, 1909
Adams, Daniel P.	Lacombe	1173	Oct. 13, 1909
Ashburner, Edward	Lethbridge	1214	Mar. 15, 1910
Alspach, Wm. L.	Stavelly	1273	Mar. 29, 1910
Anderson, Axel	Granum	1280	Mar. 30, 1910
Anderson, John H.	Round Hill	1283	Apr. 1, 1910
Atkins, C. C. L.	New Dayton	1256	Apr. 14, 1910
Anderson, George H.	Barnwell	1367	Apr. 15, 1910
Aaring, Ben	Burdett	1377	Apr. 19, 1910
Allen, Ewart G.	Medicine Hat	2173	Apr. 23, 1912
Allen, Ewart G.	Medicine Hat	1389	Apr. 25, 1910
Ansley, Harvey R. B.	Medicine Hat	1390	Apr. 25, 1910
Allen, Richard	Lethbridge	1421	June 11, 1910
Allan, Robert	Calgary	3044	Sept. 13, 1916
Alger, George V.	Medicine Hat	2174	Apr. 23, 1912
Ameson, Sigurd A.	Eagle Hill	1550	Oct. 17, 1910
Atkinson, Louis E.	Claresholm	1642	Mar. 16, 1911
Aitcheson, George	Green Lawn	1695	Mar. 30, 1911
Ainsley, Wm. G.	Bashaw	1712	Apr. 5, 1911
Andenberg, Claus P.	Bassano	1849	June 13, 1911
Andenberg, Claus P.	Bassano	2735	Apr. 23, 1914
Anderson, Victor	Granum	1874	July 13, 1911
Allen, Richard	New Dayton	1974	Oct. 24, 1911
Allen, Richard	New Dayton	2418	Nov. 13, 1912
Atkinson, Thomas	Little Volga	1986	Nov. 10, 1911
Arm, William F.	Lethbridge	2032	Feb. 14, 1912
Anderson, Carl	Taber	2056	Mar. 13, 1912
Albert, Max	Perseker	2123	Apr. 4, 1912
Audland, Andrew	Carlstadt	2124	Apr. 4, 1912
Allender, Loren L.	Lille	2242	May 2, 1912
Albertson, P. L.	Edmonton	2327	July 16, 1912
Armstrong, Alex.	Red Deer	2396	Oct. 16, 1912
Allen, James Henry	Calgary	2450	Jan. 15, 1913
Anderson, Frank	Calgary	2526	Apr. 21, 1913
Adey, Frederick C.	Canmore	2679	Jan. 12, 1914
Allen, Joseph	Bankhead	2885	Apr. 8, 1915
Alward, Robert B.	Calgary	2757	May 18, 1914
Anderson, Crist	Calgary	2796	July 18, 1914
Anderson, William	Edmonton	2808	Aug. 17, 1914
Appleby, Elmer L.	Calgary	2692	Feb. 19, 1914
Appleby, Elmer L.	Calgary	2948	Oct. 14, 1915
Aldridge, Herman	Cardston	2966	Dec. 13, 1915
Anderson, David	High River	2876	Mar. 26, 1915
Abernethy, James W.	Cardiff	2894	Apr. 6, 1916
Attrill, James A.	Medicine Hat	3048	Sept. 14, 1916

Schedule of Holders of Final Certificates of Qualification under
The Boilers Act.—*Continued.*

NAME	ADDRESS	NO. OF CERT.	DATE OF ISSUE.
<i>Third Class.—Continued.</i>			
Blatchford, Peter	Edmonton	*37	Nov. 28, 1899
Bawtinheimer, H. E.	Red Deer	*185	Dec. 18, 1901
Billo, Joseph	Edmonton	*193	Dec. 18, 1901
Bernier, Alexis	Lamoureux	*205	Dec. 18, 1901
Berlinguette, Alfred	Whitford	*255	Aug. 18, 1902
Burwell, Arthur P.	Edmonton	*354	Apr. 24, 1903
Berg, John	Fort Saskatchewan ..	*356	May 13, 1903
Bolduc, Joseph	Beaumont	*362	May 13, 1903
Bowers, Richard J.	Strathcona	*364	May 13, 1903
Briggs, M. R.	Red Deer	*371	May 13, 1903
Bricker, Menno C.	Okotoks	*471	Nov. 6, 1903
Brown, Robert S.	Lamoureux	*480	Jan. 15, 1904
Burbank, Lyle A.	Calgary	*483	Feb. 10, 1904
Billow, Adolph	Canmore	*486	Mar. 14, 1904
Bailey, R. B.	Edmonton	*527	Apr. 18, 1904
Brenton, J. R.	Edmonton	*544	Apr. 18, 1904
Bolduc, Peter	Beaumont	*638	Oct. 15, 1904
Bevington, George E.	Strathcona	*642	Oct. 15, 1904
Browns, Thos. J.	Medicine Hat	*83	Apr. 9, 1906
Brown, John, Jr.	Innisfail	*757	Mar. 24, 1905
Pruce, Charles R.	Lacombe	*761	Mar. 24, 1905
Blewett, Wm. G.	Mewassin	*818	Apr. 14, 1905
Bauclin, Theophile	Legal	*204	Aug. 14, 1906
Brunelle, John	Beaumont	*821	Apr. 14, 1905
Erodle, Wm. A.	Ponoka	*848	May 30, 1905
Blanchette, Peter	Fort Saskatchewan ..	257	Dec. 31, 1906
Bradbeer, Edward	Lethbridge	14	Sept. 16, 1905
Elson, Wm. Jas.	Lethbridge	2513	Apr. 9, 1913
Baker, Charles L.	East Clover Bar ..	27	Sept. 16, 1905
Bittner, Anton	Ponoka	56	Nov. 16, 1905
Bell, Harry	Daugh	71	Mar. 16, 1906
Baker, Thomas	Calgary	72	Mar. 19, 1906
Doote, Edward	Pine Lake	107	Apr. 24, 1906
Bodman, John A.	Calgary	885	Mar. 19, 1909
Bartlett, Percy R.	Edmonton	142	May 29, 1906
Burns, David	Grassy Lake	170	Aug. 11, 1906
Baden, Wm. F.	High River	196	Aug. 13, 1906
Benz, August J.	Mundare	216	Sept. 13, 1906
Bates, Minor	Strathcona	2357	July 19, 1912
Brown, A. J.	Wavy Lake	233	Sept. 21, 1906
Bucher, L. W.	Wetaskiwin	273	May 15, 1907
Berg, John P.	Wetaskiwin	280	May 15, 1907
Earr, Ralph	Edmonton	286	May 15, 1907
Beggs, John	Innisfail	295	May 20, 1907
Euckton, Henry J.	Olds	302	May 23, 1907
Bugton, Ole G.	Harmattan	304	May 23, 1907
Eergen, Jacob	Didsbury	319	May 29, 1907
Bush, Frank C.	Didsbury	2804	Aug. 16, 1914
Barker, William L.	Calgary	343	June 4, 1907
Brotherston, Robert A.	Calgary	345	June 4, 1907
Barnes, Wm. J.	Calgary	346	June 4, 1907
Brown, Wilfred B.	Calgary	359	June 4, 1907
Bush, Henry	Blackfalds	366	June 7, 1907
Brereton, Thomas A.	Valley City	376	June 7, 1907
Brown, Wm. H.	Edmonton	385	June 14, 1907
Berry, Robert G.	Fort Saskatchewan ..	392	June 14, 1907

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Schedule of Holders of Final Certificates of Qualification under
The Boilers Act.—*Continued.*

NAME	ADDRESS	NO. OF CERT.	DATE OF ISSUE.
<i>Third Class.—Continued.</i>			
Bradbury, Arthur T.	Edberg	398	June 14, 1907
Batke, Albert L.	Ferry Point	417	June 14, 1907
Bucker, Walter L.	Mossleigh	424	June 19, 1907
Brower, Archibald B.	Pincher Creek	328	Apr. 1, 1909
Black, Robert	Strathcona	479	July 24, 1907
Boomer, Marshall	Blackfalds	481	July 27, 1907
Powman, Albert	Strathcona	485	Aug. 28, 1907
Brickman, Joseph T.	Pembina	495	Oct. 15, 1907
Bell, Wm. G.	Red Deer	515	Oct. 22, 1907
Eergen, Henry	Didsbury	527	Oct. 24, 1907
Burchnall, Frank N.	Bluff Centre	2927	July 14, 1915
Bawlaugh, John J.	Calgary	559	Jan. 20, 1908
Burwell, Wm.	Gladys	569	Mar. 23, 1908
Blair, George R.	Claresholm	570	Mar. 23, 1908
Rase, John L.	Reid Hill	572	Mar. 23, 1908
Blackorby, W. G.	Claresholm	575	Mar. 23, 1908
Eowerman, Cliff	Cowley	599	Apr. 8, 1908
Bowerman, Cliff	Cowley	1635	Mar. 15, 1911
Banfield, J. Frank	Lethbridge	626	Apr. 9, 1908
Bryant, Percy B.	Lethbridge	627	Apr. 9, 1908
Brown, John	Evarts	635	Apr. 14, 1908
Recker, Waitland J.	Red Deer	636	Apr. 14, 1908
Brubaker, Albert J.	Medicine Hat	1376	Apr. 18, 1910
Burke, Benj. S.	Lacombe	693	May 6, 1908
Bader, Benj. H.	Lethbridge	704	May 14, 1908
Bateman, Ewart W.	Lethbridge	744	Aug. 6, 1908
Baxter, John	Red Deer	751	Sept. 3, 1908
Blacklock, Robert O.	Westward Ho	754	Sept. 8, 1908
Butts, John H.	Olds	755	Sept. 8, 1908
Brooke, Frederick C.	Olds	759	Sept. 11, 1908
Ball, Arthur	Mayville	767	Sept. 14, 1908
Furns, William	Higgins	768	Sept. 14, 1908
Bowick, Charles C.	Tofield	810	Sept. 28, 1908
Bowick, John D.	Tofield	811	Sept. 28, 1908
Brown, John	Kitscoty	812	Sept. 28, 1908
Brainard, Jerome W.	Nanton	824	Oct. 2, 1908
Eowler, Thomas H.	Macleod	845	Oct. 6, 1908
Eenjamin, Albert	Morinville	862	Oct. 20, 1908
Bannerman, Wm.	Red Deer	*189	Dec. 18, 1901
Boomer, Alonzo	Lacombe	57	Nov. 22, 1905
Bartholomew, Claude D. ...	Morinville	886	Mar. 13, 1909
Bailey, Charles	Mountain House ...	887	Mar. 20, 1909
Fessey, Alfred	Stettler	961	Apr. 13, 1909
Bell, David J.	High River	966	Apr. 16, 1909
Bailey, George	Magrath	994	Apr. 22, 1909
Bell, Andrew J.	Shepard	1018	Apr. 28, 1909
Frantz, Albert A.	Mewassin	1036	Apr. 28, 1909
Baumbach, John	Irvine	1046	May 1, 1909
Bishop, Frank E.	Medicine Hat	1047	May 1, 1909
Barnes, Edward	Edmonton	1061	May 21, 1909
Brown, George C.	Edmonton	1077	May 26, 1909
Bakken, Nels O.	Iron Springs	1078	May 28, 1909
Benson, Roy	Calgary	1080	June 8, 1909
Paker, Bernard S.	Nanton	1115	Sept. 21, 1909
Burr, John C.	Calgary	1116	Sept. 21, 1909

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Schedule of Holders of Final Certificates of Qualification under
The Boilers Act.—*Continued.*

NAME	ADDRESS	NO. OF CERT.	DATE OF ISSUE.
<i>Third Class.—Continued.</i>			
Betton, Thomas W.	High River	1140	Sept. 21, 1909
Boyle, James E.	Blairmore	1684	Mar. 29, 1911
Bercyzk, Julius	Edmonton	1976	Oct. 24, 1911
Benson, George	Taber	1151	Sept. 28, 1909
Ejar, Frank	Calmar	1158	Sept. 29, 1909
Elack, Andrew	Edmonton	1171	Oct. 9, 1909
Bradley, Harold R.	Wetaskiwin	1176	Nov. 5, 1909
Barley, Jack E.	Edmonton	1181	Nov. 16, 1909
Burness, Henry	Edmonton	1191	Jan. 10, 1910
Bouyea, Arthur	Calgary	1193	Feb. 3, 1910
Berwick, Albert E.	Red Deer	1196	Mar. 4, 1910
Beamer, Frank A.	Calgary	1203	Mar. 7, 1910
Bishop, Harvey M.	Calgary	1204	Mar. 7, 1910
Blackstock, John	Calgary	1205	Mar. 7, 1910
Bonieman, William	Lethbridge	1215	Mar. 15, 1910
Buchring, William	Winnifred	1216	Mar. 15, 1910
Barbin, M. J.	Coaldale	1217	Mar. 15, 1910
Baker, Thomas R.	Magrath	1218	Mar. 15, 1910
Beatty, Ed. S.	Lethbridge	1219	Mar. 15, 1910
Bryant, Arthur	Lethbridge	1220	Mar. 15, 1910
Baird, Sam	Blairmore	1625	Mar. 11, 1911
Bochnlein, Galuss J.	Macleod	1636	Mar. 15, 1911
Bochnlein, Galuss J.	Macleod	1266	Mar. 28, 1910
Buck, Herbert W.	Kitseoty	1302	Apr. 6, 1910
Buckler, Eric W.	Black Diamond	1322	Apr. 8, 1910
Buck, Alphalus B.	Okotoks	1323	Apr. 8, 1910
Brown, Archie D.	Acme	1334	Apr. 11, 1910
Bowman, Elra	Halkirk	1284	Apr. 1, 1910
Bonallo, Herbert D.	Calgary	1381	Apr. 21, 1910
Bonallo, Keir	Calgary	1382	Apr. 21, 1910
Eabe, Richard	Whitla	1391	Apr. 25, 1910
Riron, J. Hercule	Edmonton	1117	May 13, 1910
Barr, John	Calgary	1418	June 2, 1910
Bent, Wm. K.	Coleman	1441	July 14, 1910
Bryce, William	Davisburg	1485	Sept. 6, 1910
Eree, Ernest N.	Edmonton	1491	Sept. 13, 1910
Burton, Francis J.	Edgerton	1492	Sept. 16, 1910
Bratvold, Oscar	Dina	1493	Sept. 16, 1910
Barstad, Sanders E.	Lee Creek	1494	Sept. 16, 1910
Brettell, James E.	Calgary	1520	Sept. 23, 1910
Brown, George J.	Granum	1539	Oct. 3, 1910
Brubaker, Jonas	Mayton	1551	Oct. 17, 1910
Barrett, Alfred	Fonoka	1556	Oct. 17, 1910
Burton, Frederick Wm.	Strathcona	1559	Oct. 19, 1910
Brown, Frederick H.	Medicine Hat	1563	Oct. 20, 1910
Bradley, Harold	Bassano	1579	Nov. 14, 1910
Byers, Elmer L.	New Dayton	1858	June 20, 1912
Byers, Elmer L.	New Dayton	1583	Nov. 17, 1910
Bailey, Evans	Coleman	1776	Apr. 24, 1911
Bailey, Evans	Coleman	1584	Nov. 17, 1910
Bridge, Ray C.	Calgary	1590	Dec. 8, 1910
Borrows, William	Lethbridge	2244	May 1, 1912
Bond, Newton	Mannville	1593	Dec. 10, 1910
Brouse, Jason W.	Calgary	1608	Jan. 23, 1911
Bergman, Jos. A.	Lethbridge	2710	Mar. 24, 1914
Bennett, Fred C.	Hillcrest	2072	Mar. 18, 1912
Brubaker, Isaac	Airdrie	1646	Mar. 20, 1911

Schedule of Holders of Final Certificates of Qualification under
The Boilers Act.—*Continued.*

NAME	ADDRESS	NO. OF CERT.	DATE OF ISSUE.
<i>Third Class.—Continued.</i>			
Brown, John E.	Calgary	1647	Mar. 20, 1911
Bye, Martin	Lillico	1670	Mar. 24, 1911
Bullman, John E.	Warner	1685	Mar. 29, 1911
Berrigan, Steve	Bassano	1671	Apr. 19, 1911
Broughton, Wm. J.	Calgary	1762	Apr. 19, 1911
Bennifield, John G.	Rosyth	1713	Apr. 5, 1911
Broahen, Wm. H.	Medicine Hat	1731	Apr. 7, 1911
Ballew, George L.	Medicine Hat	1750	Apr. 15, 1911
Baumbach, Jacob I.	Irvine	1751	Apr. 15, 1911
Burrett, Elmer	Taber	1777	Apr. 24, 1911
Braumberger, Fred C.	Berseker	1801	May 6, 1911
Barnes, Joseph	Bassano	1817	May 20, 1911
Bell, John F.	Lethbridge	1825	May 26, 1911
Berg, Carl M.	Calgary	1848	June 13, 1911
Bradshaw, R. Davis	Edmonton	1868	June 21, 1911
Pennett, Wm. D.	Strathmore	1879	July 15, 1911
Bowler, Hubert A.	Edmonton	1888	Aug. 16, 1911
Branning, L. E.	Bow Island	1906	Aug. 24, 1911
Burns, Robert W.	Holmglen	1926	Sept. 7, 1911
Bartman, George V.	Castor	1927	Sept. 7, 1911
Butters, Henry G.	Airdrie	1931	Sept. 7, 1911
Bowen, Robert	Strathcona	1953	Sept. 9, 1911
Baiers, Peter	Edmonton	1967	Sept. 20, 1911
Boler, Thomas A.	Keoma	2593	June 21, 1913
Blades, George	Stirlingville	1968	Oct. 20, 1911
Braithwaite, Harry	Lethbridge	1975	Sept. 24, 1911
Blake, James H.	Calgary	2005	Dec. 8, 1911
Brown, William	Coleman	2071	Mar. 18, 1912
Briggs, Miron W.	Barons	2090	Mar. 22, 1912
Coisvert, Antoine A.	Legal	2095	Mar. 25, 1912
Bruce, George B.	Cardiff	2096	Mar. 25, 1912
Earnum, Louis O.	Acme	2108	Mar. 28, 1912
Baker, Elmer	Champion	2148	Apr. 16, 1912
Benson, Elmer A.	Brunetta	2149	Apr. 16, 1912
Bland, Harry O.	Taber	2156	Apr. 19, 1912
Brausen, John J.	Spring Lake	2163	Apr. 20, 1912
Bonnieman, John	Seven Persons	2175	Apr. 23, 1912
Bissett, Robert B.	Gainsford	2192	Apr. 24, 1912
Bissett, Charles M.	Gilpin	2193	Apr. 24, 1912
Beers, John	Calgary	2202	Apr. 26, 1912
Bibby, Reginald	Pine Creek	2235	Apr. 29, 1912
Burgess, George G.	Lake View	2250	May 3, 1912
Birnel, Ernest E.	Sunny Slope	2251	May 3, 1912
Burnette, Fred N.	Calgary	2271	May 22, 1912
Boulet, John	Calgary	2272	May 22, 1912
Brennan, Cornelius E.	Bassano	2273	May 22, 1912
Bush, John Thomas	Edmonton	2308	June 17, 1912
Bird, Jos. Samuel	Edmonton	2326	July 12, 1912
Ruttre, Clement	Noyes Crossing	2329	July 16, 1912
Bristo, Wm. George	Calgary	2338	July 18, 1912
Brown, James	Calgary	2404	Oct. 19, 1912
Bailey, Peter	Edmonton	3083	Dec. 9, 1916
Baynton, Edward	Wainwright	2423	Dec. 13, 1912
Bevins, Harvey S.	Irvine	2473	Mar. 7, 1913
Baldwin, Harry	Diamond City	2474	Mar. 10, 1913
Butti, Petro	Frank	2483	Mar. 14, 1913
Rjornson, Esbjorn	Kananaskis	2510	Apr. 7, 1913
Baer, E. F.	Redcliff	2517	Apr. 15, 1913

Schedule of Holders of Final Certificates of Qualification under
The Boilers Act.—*Continued.*

NAME	ADDRESS	NO. OF CERT.	DATE OF ISSUE.
<i>Third Class.—Continued.</i>			
Bennett, William A.	Calgary	2528	Apr. 21, 1913
Bonkoski, Anthony J.	Marlboro	2546	Apr. 26, 1913
Belisle, Fred A.	Redcliff	2565	May 15, 1913
Bickerton, George H.	Gleichen	2571	May 19, 1913
Benton, Charles Ed.	Innisfail	2652	Dec. 13, 1913
Berlinguette, L. C.	St. Paul des Metis ..	2655	Dec. 16, 1913
Bainbridge, Wilfred	Beaver Mines	2706	Mar. 24, 1914
Bezley, Edwin C.	Calgary	2731	Apr. 21, 1914
Paldwin, George L.	Mountain Park	2738	Apr. 27, 1914
Eaumont, Carl D.	Champion	2806	Aug. 12, 1914
Barr, James	Calgary	2844	Nov. 23, 1914
Bonisteel, Charles A.	Edmonton	2864	Feb. 12, 1915
Burns, William John	Coleman	2871	Mar. 23, 1915
Bombardier, Guesseppl	Blairmore	2872	Mar. 23, 1915
Burrow, William	Calgary	2905	Apr. 23, 1915
Brewer, John C.	Taber	2933	Aug. 20, 1915
Burger, Henry	Edmonton South	2956	Nov. 15, 1915
Barnes, William H.	Edmonton	3007	Apr. 25, 1916
Bradley, Richard H.	Edmonton	3024	June 12, 1916
Berte, Mansuto	Calgary	3031	July 7, 1916
Barber, George	Clover Bar	3059	Oct. 24, 1916
Bebbington, Chas. H.	Strathmore	3080	Dec. 8, 1916
Currie, L.	Strathcona	*23	Oct. 9, 1899
Cameron, John	Edmonton	*25	Oct. 9, 1899
Carscadden, F. W.	Strathcona	*45	Mar. 7, 1900
Clink, George J.	Lacombe	*115	Dec. 31, 1900
Campbell, Michael	Canmore	*141	May 1906
Cruikshank, Charles	Red Deer	*186	Dec. 18, 1901
Clauson, John	Red Deer	*231	Apr. 23, 1902
Currie, William	Medicine Hat	*256	Aug. 18, 1902
Currie, Archibald	Medicine Hat	*406	Aug. 22, 1903
Calhoun, Culver	Calgary	*488	Mar. 14, 1904
Curtis, W. W.	Carstairs	*551	Dec. 20, 1904
Coulter, Frank	Edmonton	*528	Apr. 18, 1904
Cunningham, J. E.	Ellerslie	*529	Apr. 18, 1904
Clark, W. A.	Edmonton	*530	Apr. 18, 1904
Charette, Clifford	Beaumont	*634	Oct. 15, 1904
Cote, Joseph	Beaumont	*637	Oct. 15, 1904
Crichton, David O.	Lethbridge (dup.) ..	59	Dec. 2, 1905
Carpenter, David	Pincher Creek	*679	Dec. 9, 1904
Commins, Walter J. C.	Calgary	*743	Mar. 16, 1905
Colter, Charles	Medicine Hat	*860	June 14, 1905
Converse, E.	Ponoka	55	Nov. 16, 1905
Campou, Denis	St. Albert	82	Mar. 26, 1906
Clausen, Daniel	Evarts	106	Apr. 24, 1906
Cartwright, George	Calgary	116	Apr. 30, 1906
Cooper, Wm. S.	Calgary	126	Apr. 30, 1906
Craig, James T.	Edmonton	144	May 29, 1906
Colwell, Frank L.	Didsbury	152	May 31, 1906
Craig, Mert E.	Markerville	158	May 31, 1906
Clark, James Samuel C. ...	Taber	172	Aug. 11, 1906
Clark, O. S.	Meadow Creek	1087	Oct. 20, 1909
Cascaden, Arthur	Nanton	194	Aug. 13, 1906
Charboneau, Len	Fort Saskatchewan ..	213	Sept. 13, 1906
Camfield, Ernest L.	Stettler	229	Sept. 20, 1906

*Indicates Certificate was granted by North-West Territories.

Schedule of Holders of Final Certificates of Qualification under
The Boilers Act.—*Continued.*

NAME	ADDRESS	NO. OF CERT.	DATE OF ISSUE.
<i>Third Class.—Continued.</i>			
Chabot, Joseph	Edmonton	235	Sept. 20, 1906
Coghill, Albert	Red Deer	239	Sept. 27, 1906
Cummings, Wm. J.	Bentley	244	Sept. 27, 1906
Curtis, Homer G.	Edmonton	265	Apr. 29, 1907
Campbell, James H.	Edmonton	282	May 15, 1907
Code, James A.	Red Deer	296	May 20, 1907
Campbell, Johnson	Innisfail	317	May 29, 1907
Collard, Charles D.	Mundare	332	May 31, 1907
Cosgrove, James McA.	Calgary	341	June 4, 1907
Carter, John R.	Morningside	368	June 7, 1907
Cox, John	Stettler	369	June 7, 1907
Cunningham, Orvill D.	Vegreville	395	June 14, 1907
Cunningham, Wilber R.	Bawlf	403	June 14, 1907
Campbell, Benj. F.	Edmonton	2552	May 3, 1913
Clark, Herbert	Strathcona	418	June 14, 1907
Coates, Robert A.	Cochrane	2347	Nov. 25, 1914
Caplin, Fred C.	Huntsville	467	July 15, 1907
Charters, Ed. J.	Claresholm	469	July 15, 1907
Clemens, Peter F.	Stettler	531	Oct. 28, 1907
Crego, W. E.	Lacombe	537	Oct. 28, 1907
Culph, George W.	Spring Coulee	630	Apr. 9, 1908
Cook, Walter B.	Medicine Hat	659	Apr. 27, 1908
Cutting, Francis B.	Vermilion	676	Apr. 27, 1908
Chambers, John	Lloydminster	710	May 18, 1908
Castian, Desire	Cardiff	774	Sept. 18, 1908
Collard, Richard R.	Edmonton	775	Sept. 18, 1908
Coburn, Alex. F.	Daugh	787	Sept. 21, 1908
Cotterall, John	Calgary	798	Sept. 22, 1908
Clark, Tom	Cochrane	799	Sept. 22, 1908
Carrow, Joseph B.	Calgary	800	Sept. 22, 1908
Cull, Cecil	Vegreville	813	Sept. 28, 1908
Challenger, Alf. E.	Edgerton	814	Sept. 28, 1908
Carriere, Arthur	High River	825	Oct. 2, 1908
Cody, William H.	High River	826	Oct. 2, 1908
Cousins, Bert	High River	827	Oct. 2, 1908
Cousins, Walter	High River	828	Oct. 2, 1908
Cameron, George M.	Calgary	861	Oct. 10, 1908
Cleave, George M.	Vegreville	865	Oct. 27, 1908
Coffman, Robert	Frank	868	Nov. 5, 1908
Curey, Wm.	Bowville	892	Mar. 24, 1909
Conibeare, Wm. N.	Lethbridge	893	Mar. 24, 1909
Carlson, Carl G.	Didsbury	908	Mar. 26, 1909
Canton, Jules	Edmonton	939	April 3, 1909
Chester, Thomas W.	Macleod	952	April 7, 1909
Christian, Wm. M.	Vermilion	980	April 20, 1909
Cleven, Nels T.	Killam	995	April 23, 1909
Court, Wm. E.	The Gap	1019	April 28, 1909
Crews, Waldan	Medicine Hat	1048	May 1, 1909
Cathro, Aylmer G.	Lethbridge	1170	Oct. 9, 1909
Cowell, Robert J.	Edmonton	1062	Oct. 21, 1909
Chalmers, John	Coleman	1110	Sept. 18, 1909
Cartwright, Walter	Frank	1111	Sept. 18, 1909
Cotton, Samuel J.	Coleman	1112	Sept. 18, 1909
Crear, James	Edmonton	1179	Nov. 16, 1909
Cuddy, Andrew S.	Hillend	1197	Mar. 3, 1910
Czarkaski, Antonio	Edmonton	1202	Mar. 5, 1910
Campbell, John Chas.	Taber	1221	Mar. 15, 1910
Cimoline, Antonio	Lille	1248	Mar. 21, 1910
Callahan, Joseph	Pincher Creek		

Schedule of Holders of Final Certificates of Qualification under
The Boilers Act.—*Continued.*

NAME	ADDRESS	NO. OF CERT.	DATE OF ISSUE.
Third Class.— <i>Continued.</i>			
Cook, Marshall S.	Pincher Creek	1258	Mar. 22, 1910
Cook, Marshall S.	Pincher Creek	2896	April 16, 1915
Curtis, Claud C.	Macleod	1260	Mar. 22, 1912
Carroll, Thos. C. P.	Vermilion	1281	Mar. 30, 1910
Clay, Elmer	Paradise Valley	1303	April 6, 1910
Cleophas, Leif M.	Coaldale	1313	April 6, 1910
Cady, Lynn	Edmonton	1313	April 7, 1910
Cheyne, James	Edmonton	1345	April 13, 1910
Calefas, Henry	Edmonton	1403	May 17, 1910
Cutlack, Percy	Cowley	1442	July 14, 1910
Cook, Delmar E.	Innisfail	1469	Aug. 31, 1910
Cameron, James D.	Bassano	1513	Sept. 21, 1910
Clennin, Samuel	Bawlf	1521	Sept. 23, 1910
Crawford, Robert	Barnhill	1541	Oct. 7, 1910
Campbell, Hugh J.	Calgary	1564	Oct. 20, 1910
Chapman, Thomas	Lethbridge	1578	Oct. 21, 1910
Chadwick, Emm.	Calgary	1612	Mar. 7, 1911
Czerniawski, Mike	Vegreville	2476	Mar. 14, 1913
Cary, Belbert	Stettler	1664	Mar. 22, 1911
Campbell, Lewis A.	Warner	1671	Mar. 24, 1911
Campbell, Benj.	Warner	1686	Mar. 29, 1911
Coffee, Clinton	Tide Lake	1687	Mar. 29, 1911
Coyle, Ed. S.	Nanton	1732	April 10, 1911
Christian, Neal	Magrath	1763	April 19, 1911
Cox, Orville	Kesma	1778	April 24, 1911
Cleminson, Jer.	Calgary	1802	May 6, 1911
Cleminson, Wm.	Calgary	1818	May 20, 1911
Caveny, Howard	Stavely	1859	June 20, 1911
Clock, Alf. L.	River Bow	1860	June 20, 1911
Call, Hubert I.	Wetaskiwin	1870	July 6, 1911
Crinion, Bert	Sundial	1875	July 13, 1911
Cromer, Walter	Edmonton	1889	Aug. 16, 1911
Chatvaire, Jean	Edmonton	1890	Aug. 16, 1911
Chatvaire, Jean	Edmonton	2630	Sept. 20, 1914
Cameron, Frank A.	Calgary	1897	Aug. 22, 1911
Carney, Wm. C.	Nanton	1969	Oct. 20, 1911
Caron, Alphonse	Riviere Qui Barre ..	1985	Oct. 25, 1911
Cowe, George	Edmonton	1988	Nov. 10, 1911
Cook, Wm. R.	Taber	1997	Nov. 17, 1911
Corlett, Wm. Ed.	Edmonton	1768	April 21, 1911
Corlett, Wm. Ed.	Edmonton	1964	Oct. 18, 1911
Carlson, Gus A.	Battle River	2225	April 29, 1912
Carlson, Gus A.	Battle River	2287	May 29, 1912
Christie, Wm. W.	Cayley	2025	Jan. 16, 1912
Clegg, Wm. A.	Coleman	2028	Jan. 16, 1912
Corbett, Richard A.	Strathcona	2046	Feb. 23, 1912
Coskey, Clarence J.	Passley	2057	Mar. 13, 1912
Cofell, Lemmy	Ardenville	2070	Mar. 18, 1912
Crapo, George	Bickerdike	2097	Mar. 25, 1912
Clem, John W.	Bragg Creek	2109	Mar. 28, 1912
Crawford, Dan A.	Magrath	2120	April 2, 1912
Collins, George H.	Gleichen	2125	April 4, 1912
Carnahan, Reuben J.	Bassano	2126	April 4, 1912
Cameron, Wm. T.	Sedgewick	2136	April 10, 1912
Conover, George F.	Grassy Lake	2176	April 23, 1912
Collins, John	Calgary	2203	April 26, 1912
Court, Ed. Alfred	Exshaw	2204	April 25, 1912
Card, Herbert	Leslieville	2252	May 3, 1912
Cowger, Daniel L.	Bassano	2299	June 11, 1912
Collyer, Percy E.	Edmonton	2309	June 17, 1912

Schedule of Holders of Final Certificates of Qualification under
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<i>Third Class.—Continued.</i>			
Copson, Fred W.	St. Albert	2310	June 17, 1912
Cameron, Wm. John	Calgary	2339	July 18, 1912
Craig, James A.	Tilley	2340	July 18, 1912
Chrisman, Frank	Vermilion	2382	Sept. 20, 1912
Curtis, Lee L.	Edmonton	2412	Nov. 8, 1912
Cox, Arthur	Calgary	2434	Dec. 18, 1912
Crosby, William	Exshaw	2435	Dec. 18, 1912
Cathcart, James	Edmonton	2491	Mar. 26, 1913
Christianson, Oliver	Edmonton South	2444	Jan. 13, 1913
Costa, Joseph	Bellevue	2484	Mar. 14, 1913
Collin, Louis C.	Carmangay	2505	April 3, 1913
Crouch, Leroy	Redcliff	2518	April 15, 1913
Clement, Arthur L. H.	Calgary	2529	April 21, 1913
Clare, Charles E.	Medicine Hat	2567	May 15, 1913
Cartwright, Vern	New Dayton	2570	May 15, 1913
Cownden, William R.	Edmonton N.	2925	June 15, 1913
Crow, James A.	Edmonton South	2605	July 17, 1913
Califas, Henry	Carbon	2618	Aug. 21, 1913
Crawford, Thomas Henry...	Medicine Hat	2651	Dec. 13, 1913
Carson, William	Edmonton	2661	Dec. 17, 1913
Currie, George D.	Carbon	*296	Oct. 1, 1902
Curtis, Albert G.	Reist	2770	June 13, 1914
Carrier, Charles H.	Calgary	2485	Nov. 23, 1914
Chalupsky, Albert	Medicine Hat	2637	Feb. 13, 1914
Collantti, Antonio	Passburg	2703	Mar. 24, 1914
Carle, William P.	Seba	2709	Mar. 25, 1914
Coffin, Donald	Edmonton	2711	April 2, 1914
Caslick, Thomas	Cardiff	2746	May 7, 1914
Carlson, Carl Oscar	Edmonton	2749	May 13, 1914
Caulfield, Owen	Gleichen	2758	May 18, 1914
Close, Wm. A.	Lethbridge	2774	June 17, 1914
Carlson, Alf. R.	Edmonton	2782	June 22, 1914
Cornwell, William	Kipp	2791	July 10, 1914
Caldwell, Ernest F.	Calgary	2797	July 18, 1914
Collier, James B.	Edmonton	2809	Aug. 17, 1914
Cochrane, Elijah H.	Sangudo	2828	Sept. 30, 1914
Clarke, Geo. White	Banff	2832	Oct. 20, 1914
Coburn, John	Edmonton	2840	Nov. 19, 1914
Currie, Lawrence M.	Vermilion	2841	Nov. 19, 1914
Cook, William B.	Lamerton	565	Feb. 27, 1908
Cameron, Augustus F.	Edmonton	2858	Jan. 11, 1915
Craig, William Harper....	Bankhead	2886	April 8, 1915
Cochrane, Charles	Bankhead	2915	May 18, 1914
Carey, Ingram R.	Drumheller	2928	July 14, 1915
Cornish, William K.	Lethbridge	2942	Sept. 15, 1915
Clemes, Henry	Barr Head	2960	Dec. 10, 1915
Crosby, Geo. R.	Strathmore	3228	June 13, 1916
Calow, Fred	Calgary	3036	Aug. 18, 1916
Charlesworth, Geo. E.	Pocahontas	3045	Sept. 14, 1916
Clarke, Herbert E.	Edmonton	3088	Dec. 26, 1916
Delop, Thomas	Frank	*293	Sept. 30, 1902
Dobbs, F. M.	Iowalta	*515	April 18, 1904
Druar, S. P.	Riviere Qui Barre ..	*532	April 18, 1904
Dubuc, Emile	Morinville	*551	May 26, 1904
Davis, Henry E.	Didsbury	*752	Mar. 24, 1905
Davie, Alvin A.	Calgary	*846	Mar. 26, 1905
Dickson, James	Blairmore	6	Sept. 16, 1905

*Indicates Certificate was granted by North-West Territories.

Schedule of Holders of Final Certificates of Qualification under
The Boilers Act.—*Continued.*

NAME	ADDRESS	NO. OF CERT.	DATE OF ISSUE.
<i>Third Class.—Continued.</i>			
Dye, James E.	Ponoka	33	Sept. 16, 1905
Deisting, C. G.	Duhamel	54	Nov. 3, 1905
Dowling, Nelson	Edmonton	90	Mar. 11, 1906
Devillard, Louis	Edmonton	89	Mar. 11, 1906
Drader, Ernest	Lacombe	112	April 25, 1906
Dawes, Albert A.	High River	121	April 30, 1906
Dickson, William A.	Medicine Hat	167	Aug. 11, 1906
Dickens, Charles	Lille	183	Aug. 13, 1906
Dance, Walter H.	Innisfail	293	May 20, 1907
Doyle, John L.	Langdon	349	June 4, 1907
Davidson, Peter A.	Calgary	358	June 4, 1907
Drewes, H. F. W.	Mayville	373	June 7, 1907
Davidson, Andrew C.	Lacombe	377	June 7, 1907
Dersch, Anton L.	Leavings	451	July 15, 1907
Dobbie, Alex.	Pincher Creek	929	April 1, 1909
Drury, William	Taber	552	Dec. 26, 1907
Drinnon, Robert McC.	Calgary	586	Mar. 23, 1908
Deakin, Thomas	Hillcrest	606	April 8, 1908
Dickson, John	Red Deer	640	April 14, 1908
Dehning, Louis H.	Tapscott	649	April 15, 1908
Davis, George O.	Crossfield	680	May 1, 1908
Davis, George O.	Crossfield	2717	April 6, 1914
Dowsett, Alfred	North Bank	697	May 7, 1908
Davis, Chris. M.	Lavoy	724	May 18, 1908
Dennis, Glen	Vegreville	726	May 18, 1908
Denner, Joseph	Lesser Slave Lake ..	737	Aug. 6, 1908
Dunbar, Frank G.	Three Hills	756	Sept. 8, 1908
Dickan, Chas. J. H.	Didsbury	760	Sept. 11, 1908
Davis, Clarence	Stavely	829	Oct. 2, 1908
Davis, Christopher	Lethbridge	846	Oct. 6, 1908
Dingee, Harry	Lethbridge	867	Oct. 29, 1908
Dangerfield, James A.	Olds	1190	Dec. 30, 1909
Donnelly, Henry J.	Wetaskiwin	*784	Mar. 27, 1905
Dawson, John C.	Mountain View	455	July 15, 1907
Denson, Alex. R.	Bankhead	550	Dec. 5, 1907
Duffey, Alfred	Lethbridge	2656	Dec. 16, 1913
Dluski, John	Sundial	897	Mar. 24, 1909
Deugan, Hiram W.	Coleman	910	Mar. 30, 1909
Dairmont, James	Edmonton	942	April 3, 1909
Dickan, Ferd W.	Ponoka	947	April 17, 1909
Dupmeyer, Joseph	Edmonton	981	April 20, 1909
Davis, George W.	Falstaff	996	April 22, 1909
Duncan, Alex. B.	Edmonton	1063	May 21, 1909
Dixon, William	Calgary	2857	Jan. 8, 1915
Dickie, Samuel	Lethbridge	1157	Oct. 5, 1909
Davey, John B.	Calgary	1206	Mar. 7, 1910
Dawson, William	Macleod	1267	Mar. 28, 1910
Denike, George H.	Lacombe	1285	April 1, 1910
Davy, Stewart C.	Calgary	1324	April 8, 1910
Davidson, James F.	Calgary	1325	April 8, 1910
Darrow, Mason	Taber	1368	April 15, 1910
Dainger, Orlando	Stirling	1369	April 15, 1910
Dunn, Robert J.	Calgary	1383	April 21, 1910
Downing, Frank H.	Bassano	1385	April 19, 1910
Dixon, Wm.	Calgary	1415	May 23, 1910
Dow, Alexander	Lethbridge	1477	Sept. 1, 1910
Dredge, Wm. H.	Edmonton	1495	Sept. 16, 1910
Dow, James	Lethbridge	1613	Mar. 7, 1911

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Schedule of Holders of Final Certificates of Qualification under
The Boilers Act.—*Continued.*

NAME	ADDRESS	NO. OF CERT.	DATE OF ISSUE.
<i>Third Class.—Continued.</i>			
Dixon, George W.	Macleod	1638	Mar. 15, 1911
Davis, Wallace H.	Calgary	3023	June 10, 1916
De Wolfe, Wilburn	Sanderville	1672	Mar. 24, 1911
Dewar, Alex. K.	Fort Saskatchewan .	1769	April 21, 1911
Dankwerth, Wm. L.	Gleichen	1733	April 10, 1911
Desler, Henry C.	Stavely	1779	April 24, 1911
Dunn, Charles W.	Calgary	1803	May 6, 1911
Downham, Mark	Calgary	1804	May 6, 1911
Davison, H. Y.	Rexboro	1813	May 18, 1911
Damman, William	New Dayton	1826	May 26, 1911
Davis, William A.	Edmonton	1895	Aug. 18, 1911
Doten, Earl B.	Calgary	1932	Sept. 8, 1911
DeVore, Harley G.	Edmonton	1960	Sept. 30, 1911
Dow, Gavin M.	Lethbridge	2934	Aug. 20, 1915
Davis, Alfred J.	Lethbridge	2015	Dec. 19, 1911
Desler, George C.	Nanton	1274	Mar. 29, 1910
Desler, George C.	Nanton	2747	May 7, 1914
Draper, Harry	Calgary	2035	Mar. 14, 1912
Diemont, Eugene	Stavely	2091	Mar. 22, 1912
Dubuc, Arthur	Morinville	2098	Mar. 25, 1912
Dunn, Gerald A.	Crowfoot	2127	April 4, 1912
Dyvig, Jacob	Carlstadt	2128	April 4, 1912
Davis, Newton	Bassano	2129	April 4, 1912
Dale, Lewis	Hayter	2137	April 10, 1912
Dobson, Fred, J.	Camrose	2723	April 16, 1914
Davidson, Wm. H.	Lloydminster	2195	April 24, 1912
Dowsett, Edward J.	Wahstao	2229	April 29, 1912
Dawson, Frank B.	Bassano	2274	May 23, 1912
Dillabaugh, Jacob	Edmonton	2311	June 17, 1912
Day, Ira J.	Edmonton	2381	Sept. 20, 1912
Davern, Joseph P.	Calgary	2391	Oct. 7, 1912
Dalgilsh, Thomas R.	Red Deer	2416	Nov. 12, 1912
Dowell, James H.	Edmonton	2424	Dec. 13, 1912
Davison, John W.	Calgary	2436	Dec. 18, 1912
Desjardines, J. Alex.	Mulhurst	2498	Mar. 28, 1913
Duffcliff, Charles E.	Redcliff	2519	April 15, 1913
Dunsmore, James	Big Valley	2561	May 12, 1913
Daniels, Maurice V.	Czar	2595	June 21, 1913
Davies, Griffiths	Edmonton South	2606	July 17, 1913
Demoule, Joseph	Bassano	2674	Jan. 10, 1914
Dunaway, Leonard G.	Vermilion	2676	Jan. 12, 1914
Dollars, John	High River	2693	Feb. 19, 1914
Dous, William	Wetaskiwin	2724	April 16, 1914
Duncan, William	Edmonton	2750	May 13, 1914
Dickinson, R. F.	Vermilion	2765	May 19, 1914
Davidson, Archie H.	Edmonton	2830	Oct. 15, 1914
Donnelly, William Robert ..	Edmonton	2842	Nov. 19, 1914
Dobbs, Leo. W.	Iowalta	3072	Nov. 14, 1916
Donald, Nigel G.	Calgary	2877	Mar. 26, 1915
David, Thomas	Bankhead	2887	April 8, 1915
Dahlen, Morris	Stettler	3003	April 17, 1916
Dawson, Allan	Athabasca	2911	April 27, 1915
Deas, John White	Edmonton	2922	June 15, 1915
Donaldson, John Stanley ...	Medicine Hat	2964	Dec. 10, 1915
Duncombe, Lowell B.	Taber	2987	Mar. 14, 1916
Dawson, Russell	Athabasca	2998	April 12, 1916
Drake, George A.	Calgary	3037	Aug. 18, 1916
Dickenson, George E.	Evansburg	3060	Oct. 24, 1916
Dodd, Franklin J.	Innisfall	3074	Nov. 22, 1916
Duncan, David W.	Edmonton	3075	Nov. 22, 1916
Duncan, John	Edmonton	3084	Dec. 9, 1916

Schedule of Holders of Final Certificates of Qualification under
The Boilers Act.—*Continued.*

NAME	ADDRESS	NO. OF CERT.	DATE OF ISSUE.
Third Class.— <i>Continued.</i>			
Edgerton, Guy	Red Deer	*184	Dec. 18, 1901.
Evarts, Lucius P.	Calgary	*394	Aug. 14, 1903.
Evarts, Philo	Banff	*490	Mar. 14, 1904
Embody, Charles S.	Calgary	125	April 30, 1906
Ennes, John James	Innisfail	147	May 31, 1906
Ewart, David	Strathcona	219	Sept. 13, 1906
Endersby, Joseph P.	Medicine Hat	261	April 6, 1907
Engen, Anton A.	Sunny Slope	311	May 29, 1907
Eggenberger, John K.	Coalbanks	327	May 29, 1907
Elliott, John	Calgary	353	June 4, 1907
East, Alfred E.	Strathcona	1436	July 7, 1910
Ensminger, Louis C.	Lacombe	400	June 14, 1907
Erratt, William H.	Nanton	419	June 19, 1907
Emmerson, Robert	Bellevue	911	Mar. 30, 1909
Elliott, Henry N.	Carstairs	536	Oct. 28, 1907
Euard, Arthur W.	Calgary	556	Jan. 20, 1908
Elmhirst, Joseph A.	High River	584	Mar. 23, 1908
Eiseman, Joseph	Peace River Crossing	738	Aug. 6, 1908
Ellison, O. H.	Strome	783	Sept. 18, 1908
Endersby, John George ..	Lethbridge	10	Sept. 16, 1905
Elford, Albert	Grassy Lake	1009	April 25, 1909
Edwards, Orien	Cheadle	1020	April 28, 1909
Evans, John B.	Canmore	1022	April 28, 1909
East, Neal	Edmonton	1083	July 9, 1909
Elder, Charles G.	Calgary	1118	Sept. 21, 1909
Entwhistle, Charles H.	Edmonton	1145	Sept. 24, 1909
Elliott, Thomas	Cardiff	1182	Nov. 24, 1909
Emrich, William	Innisfail	1198	Mar. 4, 1910
Enzenauer, Peter	Loma	1263	Mar. 24, 1910
Earl, Edgar G.	Norton	1392	April 25, 1910
Egger, Christian	Bowville	1411	May 21, 1910
Ells, Frederick B.	Coleman	1422	June 11, 1910
Erickson, Eric A.	Milk River	1423	June 11, 1910
Enyeart, Charles F.	New Dayton	1566	Oct. 20, 1910
Evans, Joseph W.	Magrath	1314	April 7, 1910
Emde, William J.	Coaldale	1614	Mar. 7, 1911
Eld, Gust	Parkland	1651	Mar. 20, 1911
Eshpeter, Henry	Spring Lake	1714	April 5, 1911
Ensign, Elmer G.	Barnwell	1780	April 24, 1911
Edwards, James M.	Calgary	1820	May 20, 1911
Evanson, Ed. M.	Raymond	1876	July 13, 1911
Earl, Alex.	Strathcona	1891	Aug. 16, 1911
Evans, Earl L.	Leslieville	1928	Sept. 7, 1911
Evans, Thomas O.	Lille	1999	Nov. 17, 1911
Eiklor, James J.	Calgary	2036	Feb. 14, 1912
Edmonds, Charles	Strathcona	2900	April 20, 1915
Elynik, Fred	Mundare	2194	April 24, 1912
Engen, Ole K.	Suffield	2301	June 11, 1912
Evans, Alfred	Edmonton	2312	June 17, 1912
Eades, John J.	Vermilion	2393	Oct. 10, 1912
Elliott, Walter E.	Calgary	2643	Nov. 8, 1913
Edwards, Frank T.	Pine Lake	2465	Feb. 12, 1913
Evans, William	Passburg	2616	Aug. 12, 1913
Ebbers, Bernard H.	Edmonton	2662	Dec. 17, 1913
Everts, Cedric F.	Wetaskiwin	2685	Feb. 12, 1914
Edgar, Robert	Calgary	2916	May 18, 1915
Eltherington, George R.	Calgary	2941	Sept. 28, 1915
Edblad, John W.	Westerose	3052	Oct. 17, 1916.

*Indicates Certificate was granted by North-West Territories.

Schedule of Holders of Final Certificates of Qualification under
The Boilers Act.—*Continued.*

NAME	ADDRESS	NO. OF CERT.	DATE OF ISSUE.
<i>Third Class.—Continued.</i>			
Flack, Samuel	Red Deer	*194	Dec. 18, 1901
Findlay, James F.	Leduc	*211	Dec. 18, 1901
Fair, Francis Wm.	Medicine Hat	*257	Aug. 18, 1902
Foster, Wm. W.	Red Deer	*370	May 13, 1903
Fluker, W. R.	Fort Saskatchewan ..	*545	April 18, 1904
Flett, Andrew R.	Calgary	*744	Mar. 16, 1905
Farren, Edgar	Evarts	*777	Mar. 24, 1905
Fowler, Wm. H.	Edmonton	*800	Mar. 31, 1905
Flintoff, Walter	Partridge Hill	*816	April 14, 1905
Fairman, Charles	Medicine Hat	85	April 11, 1906
Frizzelle, James I.	Lacombe	104	April 24, 1906
Fullerton, Thomas W.	Calgary	122	April 30, 1906
Fordyce, J.	Bowden	156	May 31, 1906
Falt, Ainsley M.	Morinville	208	Sept. 13, 1906
Fitzsimmons, G. E.	Calgary	237	Sept. 24, 1906
Falkenberg, Fred D.	Saron	275	May 15, 1907
Forster, Michael	Leduc	278	May 15, 1907
Fortune, George C.	Trochu Valley	2683	Jan. 20, 1914
Fryett, Arthur J.	Neapolis	312	May 29, 1907
Frieson, J. F.	Sunny Slope	313	May 29, 1907
Fike, Daniel K.	Crossfield	320	May 29, 1907
Fuller, Albert	Calgary	357	June 4, 1907
Fox, Henry	Olds	380	June 10, 1907
Findlay, Thomas	High River	429	June 19, 1907
Fricke, Charles L.	Erskine	541	Oct. 28, 1907
Fauver, A. E.	Lamerton	542	Oct. 28, 1907
Freeze, Benj. H.	Edmonton	590	April 2, 1908
Fried, Vincent J.	Granum	598	April 2, 1908
Fried, Vincent J.	Granum	1643	Mar. 15, 1911
Firth, Hedrick	Lethbridge	603	April 8, 1908
Fowler, Dan T.	Magrath	614	April 8, 1908
Frieson, Peter	Didsbury	652	April 15, 1908
Fenner, John S.	Camrose	718	May 18, 1908
Farquhar, Alex. W.	Calgary	2530	April 21, 1913
Fortin, Charles C.	Morinville	876	Jan. 18, 1909
Forland, Ole	Lethbridge	900	Mar. 24, 1909
Feargue, Francis J.	Pincher Creek	930	April 1, 1909
Forrest, James O.	Lacombe	951	April 6, 1909
Fowle, William	Blayney	967	April 16, 1909
Forstin, John	New Dayton	989	April 20, 1909
Falardean, Aaron J.	Taber	1010	April 25, 1909
Francis, Joseph	Taber	1011	April 25, 1909
Francis, Joseph	Taber	1717	April 5, 1911
Fullerton, Daniel W.	Taber	1012	April 25, 1909
Fullerton, Daniel W.	Taber	2686	Feb. 12, 1914
Fielding, James	Lethbridge	1434	June 25, 1910
Farend, Charles H.	Barnwell	1152	Sept. 28, 1909
Finstad, Ole A.	Claresholm	1153	Sept. 28, 1909
Fansher, Fred	Lamont	1159	Sept. 29, 1909
Fedun, John	Mundare	1160	Sept. 29, 1909
Frey, Frank	Frank	2485	Mar. 14, 1913
Fairbairn, Robert	Vegreville	1174	Oct. 22, 1909
Fietz, Otto	Diamond City	1222	Mar. 15, 1910
Fisher, Bert	Coleman	1250	Mar. 21, 1910
Fowler, Willis L.	High River	1261	Mar. 22, 1910
Frank, Christopher E.	Frankburg	1264	Mar. 24, 1910
Fedoruk, Tymofi	Vegreville	1305	April 6, 1910
Fenton, S. A.	Taber	1370	April 15, 1910
Fletcher, John R.	Grassy Lake	1378	April 19, 1910

*Indicates Certificate was granted by North-West Territories.

Schedule of Holders of Final Certificates of Qualification under
The Boilers Act.—*Continued.*

NAME	ADDRESS	NO OF CERT.	DATE OF ISSUE.
<i>Third Class.—Continued.</i>			
Francis, William	Carlstadt	1393	April 25, 1910
Frigon, Fred	Calgary	1447	July 15, 1910
Fike, Jesse J.	Barnwell	1511	Sept. 21, 1910
Forster, James	Hillcrest	1627	Mar. 11, 1911
Firth, Wilfred	Macleod	1637	Mar. 15, 1911
Farrell, Percy E.	Carstairs	1652	Mar. 20, 1911
Ferguson, Dugald	Nanton	1734	April 10, 1911
Frizzelle, Jinkle G.	Calgary	1735	April 10, 1911
Freisen, Ger. H.	Sunny Slope	1715	April 5, 1911
Ferschweiler, John	Trochu	1716	April 5, 1911
Flynn, Charles	Calgary	1736	April 11, 1911
Fleming, James	Medicine Hat	1781	April 24, 1911
Forsyth, John A.	Red Deer	1798	April 26, 1911
Fleming, Andrew B.	Irricana	1805	May 6, 1911
Frache, Richard	Lethbridge	1862	June 20, 1911
Foster, Arthur C.	Calgary	1898	Aug. 22, 1911
Foughty, Clifford R.	Carlstadt	1933	Sept. 8, 1911
Freeman, Herbert B.	Edmonton	2641	Oct. 28, 1913
Flamme, August W.	Bow Island	2058	Mar. 13, 1912
Fitzpatrick, John	Bellevue	2073	Mar. 18, 1912
Farmer, Raymond W.	Morningside	2138	April 10, 1912
Fletcher, James	Metiskow	2165	April 20, 1912
Freeland, Charles	Hindville	2231	April 29, 1912
Fenwick, Charles	Strome	2297	June 10, 1912
Fairhurst, George	Coleman	2305	June 14, 1912
Farnsworth, Joseph	Seven Persons	2351	July 19, 1912
Flett, Fred W.	Edmonton	2445	Jan. 13, 1913
Farrell, George C.	Edmonton	2548	April 26, 1913
Forgie, Alex.	Clover Bar	2647	Nov. 11, 1913
French, George B.	Cardiff	2742	April 29, 1914
Filion, Joseph	Edmonton	2761	May 19, 1914
Finch, Norman F.	Edmonton	2884	April 5, 1915
Forrest, Richard Gray	Bankhead	2888	April 8, 1915
Fiss, Cyril A.	Edmonton	2995	April 6, 1916
Fletcher, Ivan	Edmonton	3061	Oct. 21, 1916
Gillman, Herbert	Consort	*704	Feb. 13, 1905
Gagnon, Alfred	St. Albert	2990	Mar. 27, 1916
Gaetz, James F.	Red Deer	*226	April 23, 1902
George, John	Kamloops	*478	June 13, 1904
Giddings, Thomas	Calgary	*489	Mar. 14, 1904
Grigat, John	Leduc	*533	April 18, 1904
Gobel, H. C.	Edmonton	*543	April 18, 1904
Gardner, Marques	Red Deer	6780	Mar. 24, 1905
Green, John	Medicine Hat	2285	May 25, 1912
Gallup, Walter E.	Medicine Hat	*858	June 14, 1905
Grote, Frank	Bon Accord	*890	Aug. 31, 1905
Griffen, Henry	Stavely	11	Sept. 16, 1905
Grote, Alex. E.	Spruce Grove	65	Mar. 16, 1906
Graf, John	Fort Saskatchewan	92	April 11, 1906
Garneau, Larry	Strathcona	224	Sept. 13, 1906
Godley, Maurice W.	Red Deer	238	Sept. 27, 1906
Grant, Farquhar	Edmonton	267	April 29, 1907
Glaspie, Ed. H.	Hurry	331	May 31, 1907
Grue, Simon T.	Camrose	394	June 14, 1907
Grove, Benj. K.	Camrose	404	June 14, 1907
Grant, George F.	Lewisville	412	June 14, 1907
Galentine, Frank	High River	434	June 19, 1907
Giese, Gottlieb W.	Spruce Grove	499	Oct. 15, 1907

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Schedule of Holders of Final Certificates of Qualification under
The Boilers Act.—*Continued.*

NAME	ADDRESS	NO. OF CERT.	DATE OF ISSUE.
<i>Third Class.—Continued.</i>			
Graham, Willard	Crossfield	519	Oct. 24, 1907
Gwilt, George	Didsbury	528	Oct. 24, 1907
Gray, John A.	Claresholm	576	Mar. 23, 1908
Gray, John A.	Claresholm	2755	May 13, 1914
Gibson, William H.	Coleman	601	April 8, 1908
Gerrard, John	Lundbreck	2625	Sept. 18, 1913
Girber, Dan E.	Sunny Slope	648	April 4, 1908
Gillett, George I.	Carstairs	681	May 1, 1908
Grundy, James	Bowden	684	May 1, 1908
Greene, George A.	Edmonton	708	May 18, 1908
Gustafson, Ivan	Leduc	1375	April 19, 1910
Gibbs, James A.	Delnorte	715	May 18, 1908
Gray, William J.	Fort Vermilion	739	Aug. 6, 1908
George, William S.	Peace River Crossing	2993	Mar. 29, 1916
Graham, John M.	Athabasca Landing	746	Aug. 13, 1908
Gotobed, B.	Strathcona	776	Sept. 18, 1908
Gale, Sidney H.	Calgary	791	Sept. 24, 1908
Gillies, William	Strathcona	872	Dec. 23, 1908
Goodfellow, James	Calgary	118	April 30, 1906
Goeson, George J.	Granum	912	Mar. 30, 1909
Gilmore, David	Frank	913	Mar. 30, 1909
Gibb, David T.	Raymond	990	April 20, 1909
Gusa, Herman E.	Calgary	1013	April 25, 1909
Grobe, Charles W.	Shepard	1023	April 28, 1909
Geertruyden, H. Van	Edmonton	1086	July 25, 1909
Gilmore, Charles R.	Red Willow	1091	Aug. 27, 1909
Gullekson, Edwin L.	Wetaskiwin	1095	Sept. 7, 1909
Guertin, Joseph E.	Bowville	1101	Sept. 15, 1909
Gowdy, William T.	Airdrie	1119	Sept. 21, 1909
Green, Jay H.	Brant	1120	Sept. 21, 1909
Grimoldby, Walter H.	Strathcona	1161	Sept. 29, 1909
Gobell, Edward	Royal View	2266	May 18, 1912
Grigat, John Jr.	Leduc	1286	April 1, 1910
Gunderson, Ingval J.	Warner	1360	April 14, 1910
Grudl, Stephen	Manfred	1404	May 17, 1910
Goodwin, William	Strathcona	1448	July 15, 1910
Gerrie, George	Oxville	1496	Sept. 16, 1910
Gibbons, George A. R.	Battenberg	1497	Sept. 16, 1910
Giese, Daniel	Spruce Grove	1498	Sept. 16, 1910
Guess, Herbert	Pincher Creek	1567	Oct. 20, 1910
Gosling, Frederick	Morley	1580	Nov. 14, 1910
Gilmer, Allan	Provost	1673	Mar. 24, 1911
Gerchke, William	Walsh	1752	April 15, 1911
Green, Charles L.	Calgary	1764	April 19, 1911
Gross, Henry A.	Burdette	1702	Mar. 31, 1911
Graham, Oscar J.	Grassy Lake	1703	Mar. 31, 1911
Gardner, Fred W.	Dalroy	1737	April 10, 1911
Gray, Jesse L.	Macleod	1782	April 24, 1911
Gunderson, Cornelius	Warner	1827	May 26, 1911
Graham, William Robert	Summerview	1828	May 26, 1911
Gray, Wallace C.	Edmonton	1844	June 9, 1911
Gray, Wallace C.	Edmonton	2748	May 7, 1914
Greenwood, Joseph	Calgary	2949	Oct. 14, 1915
Greenwood, John	Calgary	1899	Aug. 22, 1911
Graham, William A.	Coaldale	1908	Aug. 24, 1911
Gray, Irving	Yetwood	1909	Aug. 24, 1911
Gray, Elgin W.	Entwistle	2330	July 16, 1912
Gray, Luke Charles	Calgary	2367	Sept. 10, 1912
Gellhorn, Wilhelm	Strathcona	1594	Dec. 10, 1910
Gellhorn, Wilhelm	Strathcona	2425	Dec. 13, 1912

Schedule of Holders of Final Certificates of Qualification under
The Boilers Act.—*Continued.*

NAME	ADDRESS	NO. OF CERT.	DATE OF ISSUE.
<i>Third Class.—Continued.</i>			
Gloer, Harrison	Iron Springs	2059	Mar. 13, 1912
Goetz, Emil Joseph	Evergreen	2075	Mar. 18, 1912
Graf, John Peter	Independence	2100	Mar. 25, 1912
Ganser, Moritz A.	Provost	2139	April 18, 1912
Greenwood, George F.	Warner	2150	April 16, 1912
Grant, William Jr.	Killam	2167	April 20, 1912
Gair, David	Strome	2168	April 20, 1912
Griggs, Ralph	Suffield	2171	April 23, 1912
Gardner, Harold M.	Medicine Hat	2178	April 23, 1912
Gaskell, Edwin	Calgary	2201	April 25, 1912
Grainger, Albert	Wainwright	2215	April 29, 1912
Gilkinson, Robert J.	Clover Bar	2223	April 29, 1912
Goldsmith, Oliver	Ethelwyne	2224	April 29, 1912
Goodwin, Edwin C.	Bassano	2275	May 22, 1912
Graham, John	Edmonton	2560	May 8, 1913
Grimoldsby, John D.	Strathcona	2313	June 17, 1912
Griffith, Louis O.	Calgary	2341	July 18, 1912
Galonot, Ernest L.	Cowley	2352	July 19, 1912
Gueker, Stephen M.	Big Valley	2409	Oct. 23, 1912
Glennon, Joshua	Banff	2421	Dec. 4, 1912
Godby, Allen C.	Edmonton	2446	Jan. 13, 1913
Gordon, Stafford G.	Calgary	2451	Jan. 15, 1913
Grant, Henry	Medicine Hat	2520	April 15, 1913
Garrett, James W.	Lamont	2549	April 26, 1913
Grundy, Harold	Edmonton	2550	April 26, 1913
Grant, Andrew	Edmonton	2554	May 3, 1913
Graham, Alex.	Fort Saskatchewan	2706	July 17, 1913
Gillespie, Sam C.	Calgary	2614	Aug. 11, 1913
Gardner, Jack	Calgary	2732	April 21, 1914
Green, Ernest J.	Edmonton	2781	June 22, 1914
Godsen, Robert William	Edmonton S.	2810	Aug. 17, 1914
Grey, William Martin	Redcliff	2815	Aug. 20, 1914
Green, George H.	Alsask	2923	June 15, 1915
Gillespie, A. Maxwell	Fort Saskatchewan	2901	April 20, 1915
Gordon, William D.	Drumheller	3012	April 27, 1916
Green, Garrett Wm.	Medicine Hat	2940	Sept. 10, 1915
Gauthier, Paul	Cardiff	2945	Oct. 13, 1915
Gilchrist, Lee	Hillspring	3070	Nov. 13, 1916
Gilchrist, Nelson J.	Islay	2999	April 12, 1916
Grims, Leopold	Edmonton	3046	Sept. 14, 1916
Gourlay, Robt. S.	Pincher Creek	3050	Sept. 20, 1916
Gunderson, Harold	Calgary	3053	Oct. 17, 1916
Glasere, Ralph	Edmonton	3062	Oct. 24, 1916
Green, J. W. F. C.	Drumheller	3076	Nov. 22, 1916
Hewer, Jesse J.	Strathcona	*24	Oct. 9, 1899
Harrold, David	Edmonton	*54	May 28, 1900
Heffner, Frank	Bruederheim	*92	Nov. 15, 1900
Holden, J. A.	Strathcona	*114	Dec. 31, 1900
Hober, John W.	Ponoka	*214	Jan. 7, 1902
Harris, Ed. S.	Star	*327	Dec. 18, 1902
Hudson, Arthur C.	Edmonton	*330	Jan. 6, 1903
Hehsdoerfer, Joseph	Edmonton	*359	May 13, 1903
Haney, Sylvester	Lacombe	*482	Jan. 28, 1904
Houghstol, Anton	Wetaskiwin	*516	April 18, 1904
Harrold, John Jr.	Edmonton	*534	April 18, 1904
Hanklehadl, Edgar O.	Duhamel	*785	Mar. 27, 1905
Hardy, Albert Wm.	Lake de May	878	Feb. 10, 1909

*Indicates Certificate was granted by North-West Territories.

Schedule of Holders of Final Certificates of Qualification under
The Boilers Act.—*Continued.*

NAME	ADDRESS	NO. OF CERT.	DATE OF ISSUE.
<i>Third Class.—Continued.</i>			
Henschel, August	Strathcona	49	Sept. 23, 1905
Hart, William J.	Raymond	22	Sept. 16, 1905
Hacking, George A.	Magrath	23	Sept. 16, 1905
Haybarger, Charles A.	Fort Saskatchewan ..	34	Sept. 16, 1905
Hewitt, Robert E.	Bon Accord	38	Sept. 18, 1905
Hays, Morion L.	Toffield	91	April 11, 1906
Headley, Henderson	Medicine Hat	88	April 11, 1906
Higgins, James A.	Medicine Hat	87	April 11, 1906
Humbke, Detriche E.	Battle River	101	April 20, 1906
Hunter, Wm. John	Fort Saskatchewan ..	109	April 24, 1906
Hobson, Patrick J.	Strathcona	130	May 4, 1906
Hunter, Fred H.	Didsbury	151	May 31, 1906
Hallett, George E.	Camrose	163	July 7, 1906
Henry, Ortus	Claresholm	177	Aug. 13, 1906
Heighington, J. H.	Rosenroll	1321	April 7, 1910
Hammitt, J. A.	Wetaskiwin	234	Sept. 20, 1906
Harris, A. J.	Chipman	223	Sept. 13, 1906
Hardy, Wm. B.	Edmonton	270	April 29, 1907
Hellems, John	Millet	276	May 15, 1907
Hitchcock, Arthur L.	Pine Lake	292	May 20, 1907
Harris, Ed.	Mayton	303	May 23, 1907
Hardman, George S.	Mayton	306	May 23, 1907
Hilts, Neil A.	Didsbury	314	May 29, 1907
Huff, William H.	Crossfield	315	May 29, 1907
Harrison, David R.	Lamont	333	May 31, 1907
Handley, J. T.	Valley City	370	June 7, 1907
Hauser, John H.	Strome	387	June 14, 1907
Hauser, George W.	Strome	401	June 14, 1907
Halstead, Arthur L.	Edberg	407	June 14, 1907
Hoar, William J.	Berry Bank	409	June 14, 1907
Hartt, Guy C.	High River	421	June 19, 1907
Herron, John A.	Nanton	915	Mar. 30, 1909
Honan, John E.	High River	431	June 19, 1907
Hislop, Thomas L.	Taber	443	July 15, 1907
Haverold, Robert L.	Lethbridge	462	July 15, 1907
Henderson, Clifton C.	Elinor	470	July 15, 1907
Heitman, Herman	Pincher Creek	473	July 15, 1907
Hicks, Ephraim B.	Raymond	474	July 15, 1907
Harding, Norris H.	Lethbridge	848	Oct. 6, 1908
Hallman, Sydney E.	Carstairs	488	Oct. 12, 1907
Horne, Ned	Edmonton	506	Oct. 15, 1907
Healey, Joseph	Bankhead	548	Dec. 5, 1907
Henderson, John H.	Taber	554	Dec. 26, 1907
Harris, George A.	Calgary	555	Jan. 20, 1908
Horwood, Walter E.	Calgary	560	Jan. 20, 1908
Hutchings, Percy J.	Edmonton	595	April 2, 1908
Howard, Sam	Frank	2076	Mar. 18, 1912
Hills, William C.	Hillcrest	624	April 9, 1908
Hilts, Simon W.	Didsbury	654	April 15, 1908
Hoy, Walter M.	Medicine Hat	665	April 27, 1908
Haskins, Martin	Vermilion	2939	Sept. 2, 1915
Hayes, Fred J.	Vermilion	671	April 27, 1908
Hayes, Fred J.	Vermilion	2729	April 17, 1914
Hall, Richard	Lloydminster	673	April 27, 1908
Higginson, R. R.	Kitscoty	677	April 27, 1908
Holgate, John	Airdrie	685	May 1, 1908
Haselwood, Alfred W.	Rosenroll	701	May 7, 1908
Hunting, Humphrey W.	Lacombe	769	Sept. 14, 1908
Holbrook, Peter E.	Stettler	2502	Mar. 31, 1913
Hanlan, W. J.	Edmonton	777	Sept. 18, 1908

Schedule of Holders of Final Certificates of Qualification under
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NAME	ADDRESS	NO. OF CERT.	DATE OF ISSUE.
<i>Third Class.—Continued.</i>			
Haeflin, Mark E.	Exshaw	793	Sept. 22, 1908
Henderson, Alex.	Granum	830	Oct. 2, 1908
Hendrickson, John	Claresholm	831	Oct. 2, 1908
Henderson, Robert	Lethbridge	958	April 9, 1909
Hatfield, Charles L.	Blayney	968	April 16, 1909
Hanson, Peter C.	Cleversville	977	April 20, 1909
Hultgren, Victor	Stavely	978	April 20, 1909
Horne, George Jr.	Edmonton	982	April 20, 1909
Hall, David N.	Grassy Lake	993	April 20, 1909
Honeywell, Sid C.	Sedgewick	997	April 22, 1909
Hough, Oscar	Camrose	998	April 22, 1909
Haugen, Peter M.	Bardo	999	April 22, 1909
Hardy, Herbert J.	Exshaw	2680	Jan. 12, 1914
Henderson, A. J.	Langdon	1025	April 28, 1909
Hauptert, John	Lewisville	1044	April 30, 1909
Hunter, James S.	Edmonton	1064	May 21, 1909
Hendrie, James M.	Lethbridge	1102	Sept. 15, 1909
Herman, Charles	Queenstown	1121	Sept. 21, 1909
Hutchinson, Fred	High River	1122	Sept. 21, 1909
Herrick, Oscar F.	Eyremore	1123	Sept. 21, 1909
Hiney, Allan	Cochrane	1124	Sept. 21, 1909
Hatfield, Wilmer B.	Lethbridge	1178	Nov. 13, 1909
Helghs, George, Jr.	Iron Springs	1225	Mar. 15, 1910
Hewitt, James R.	Cowley	1251	Mar. 21, 1910
Homer, Samuel C.	Claresholm	1275	Mar. 29, 1910
Hazelwood, Ernest Wm.	Bittern Lake	1287	April 1, 1910
Hauser, Anthony B.	Strome	1288	April 1, 1910
Hicks, Frank I.	Raymond	1315	April 7, 1910
Harris, Thomas Wm.	Raymond	1316	April 7, 1910
Hislop, Wilber	Calgary	1320	April 7, 1910
Hendrickson, Edwin	Crossfield	1335	April 11, 1910
Hickox, William C.	Cochrane	1336	April 11, 1910
Holte, Ole	Logan	1347	April 13, 1910
Hansen, Fred	Viking	1348	April 13, 1910
Hammer, Leo	Lethbridge	1358	April 14, 1910
Hipp, William	Taber	1371	April 15, 1910
Herrick, Weston M.	Cleversville	1387	April 22, 1910
Harder, Andrew J.	Medicine Hat	1394	April 25, 1910
Harold, John	Lethbridge	1412	May 21, 1910
Hamilton, Walter	Olds	1419	June 9, 1910
Hamilton, John	Pincher Creek	1424	June 11, 1910
Hughes, Robert Samuel	Cardiff	1443	July 14, 1910
Hall, Jesse D.	Stirling	1466	Aug. 30, 1910
Horn, Peter	Lethbridge	1467	Aug. 30, 1910
Horn, William	Lethbridge	1478	Sept. 1, 1910
Hansen, Arney	Millet	1605	Jan. 20, 1911
Hill, George S.	Edmonton	1499	Sept. 16, 1910
Harwood, Thomas R.	Stettler	1515	Sept. 21, 1910
Hohle, John F.	Calgary	1523	Sept. 23, 1910
Heaton, Frank	Edmonton	1582	Nov. 15, 1910
Holte, M. D.	Kipp	1615	Mar. 7, 1911
Heyland, William N.	Claresholm	1644	Mar. 16, 1911
Hough, Floyd G.	Calgary	1653	Mar. 20, 1911
Hough, Floyd G.	Calgary	2733	April 21, 1914
Halloran, Fred P.	Strathcona	1665	Mar. 22, 1911
Harding, Thomas H.	Edmonton	1666	Mar. 22, 1911
Hanna, Robert J.	Stirling	1680	Mar. 28, 1911
Howorth, Charles	Calgary	1765	April 19, 1911
Hagen, Henry	Battle Lake	1718	April 5, 1911
Heisler, Jacob	Spring Lake	1719	April 5, 1911

Schedule of Holders of Final Certificates of Qualification under
The Boilers Act.—*Continued.*

NAME	ADDRESS	NO. OF CERT.	DATE OF ISSUE.
<i>Third Class.—Continued.</i>			
Hennessy, Robert G.	Bassano	1748	April 10, 1911
Horton, Frank S.	Medicine Hat	1753	April 15, 1911
Harrison, Harley	Lethbridge	1783	April 24, 1911
Holmberg, John A.	Lucky Lake	1784	April 24, 1911
Harrington, Dan L.	Diamond City	1829	May 26, 1911
Horton, S. B.	Barons	1830	May 26, 1911
Hardy, Robert W.	Leduc	1846	June 9, 1911
Honor, Herbert N.	Medicine Hat	1863	June 20, 1911
Huff, W. P.	Edmonton	1880	July 15, 1911
Haine, Sanford	Edmonton	1881	July 18, 1911
Harwood, Walter	Castor	1892	Aug. 16, 1911
Hornberger, Raymond	Reid Hill	1910	Aug. 24, 1911
Hango, John J.	Red Deer	1929	Sept. 7, 1911
Henry, William G.	Calgary	1934	Sept. 8, 1911
Hunerkoch, George W.	Magrath	1941	Sept. 9, 1911
Harris, John	Fishburn	1942	Sept. 9, 1911
Hossier, Charles A.	Halkirk	1961	Oct. 18, 1911
Heighington, Frank H.	Bittern Lake	1962	Oct. 18, 1911
Houghton, Ernest	Calgary	1970	Oct. 20, 1911
Hathrell, Albert	Suffield	1979	Oct. 24, 1911
Hanson, William	Spring Lake	1989	Nov. 11, 1911
Holland, Milton C.	Noble	2016	Dec. 19, 1911
Harmon, Frank E.	Pincher Stn.	1978	Oct. 24, 1911
Harmon, Frank E.	Pincher Stn.	2432	Dec. 17, 1912
Hinkle, John F.	Carlstadt	2026	Jan. 16, 1912
Holmberg, Robert E.	Calgary	2037	Feb. 14, 1912
Halverson, John A.	Edgerton	2101	Mar. 25, 1912
Halvorsen, Arnet C.	Metiskow	2140	April 10, 1912
Halvorsen, Henry G.	Metiskow	2141	April 10, 1912
Halvorsen, Holmer J.	Metiskow	2142	April 10, 1912
Holt, Olaf A.	Winnifred	2179	April 23, 1912
Holmgren, Walter	Edmonton	2196	April 24, 1912
Holmgren, Walter	Edmonton	2331	July 16, 1912
Hedlund, Victor	Wainwright	2197	April 24, 1912
Hoskins, James	Viking	2198	April 24, 1912
Haines, Charles M. J.	Calgary	2205	April 26, 1912
Hunter, Robert	Canmore	2206	April 26, 1912
Hertel, Christian	Calgary	2207	April 26, 1912
Hertel, Christian	Calgary	2437	Dec. 18, 1912
Howard, Henry	Wainwright	2216	April 29, 1912
Hawryschuk, George	Mundare	2220	April 29, 1912
Harding, Montague C.	Mannville	2230	April 29, 1912
Howes, Fred R.	Stauffer	2254	May 3, 1912
Heinze, William Ed.	Copeville	2255	May 3, 1912
Haney, Edward	Bassano	2276	May 22, 1912
Hickman, Edward H.	Gleichen	2277	May 22, 1912
Hanna, Melvin	Edmonton	2314	June 17, 1912
Hindman, James	Medicine Hat	2353	July 19, 1912
Halsall, Joseph	Stavely	2368	Sept. 17, 1912
Hardy, Thomas	Lethbridge	2369	Sept. 17, 1912
Hathaway, Harold	Edmonton	2448	Jan. 13, 1913
Hudson, Benj. R.	Cardston	2398	Oct. 17, 1912
Hesse, William	Calgary	2438	Dec. 18, 1912
Harman, Noah S. A.	Edmonton	2426	Dec. 13, 1912
Hildebrandt, Oscar	Strathcona	2689	Feb. 16, 1914
Hallett, John	Castor	1674	Mar. 24, 1911
Hallett, John	Castor	2507	April 4, 1913
Hollinger, Peter	Edmonton	2447	Jan. 13, 1913
Hancock, Wesley E.	Medicine Hat	2454	Jan. 15, 1913

Schedule of Holders of Final Certificates of Qualification under
The Boilers Act.—*Continued.*

NAME	ADDRESS	NO. OF CERT.	DATE OF ISSUE.
Third Class.— <i>Continued.</i>			
Hanson, Oscar	Calgary	2460	Feb. 12, 1913
Hanson, Eugene J.	Innisfail	2492	Mar. 26, 1913
Hayfield, John	Edmonton	2819	Aug. 28, 1914
Holloday, William B.	Rosenroll	2514	April 11, 1913
Hole, James	Medicine Hat	2521	April 15, 1913
Hanson, John E.	Bawlf	2562	May 12, 1913
Hampson, John	Edmonton	2596	June 21, 1913
Hutchinson, John W.	Medicine Hat	2601	July 10, 1913
Howard, William C.	Carlstadt	2604	July 15, 1913
High, Dan	Red Deer	2984	Feb. 14, 1916
Hackett, Walter	Taber	2617	Aug. 12, 1913
Hanna, Robert S.	Lacombe	2653	Dec. 13, 1913
Heighes, Hubert	Iron Springs	1616	Mar. 7, 1911
Hood, Torrance	Hillcrest	2704	Mar. 24, 1914
Harton, James	Beverley	2712	April 2, 1914
Humphries, Ernest O.	Edmonton	2713	April 2, 1914
Henderson, James	New Norway	2725	April 16, 1914
Hucklesbee, Leonard	Edmonton	2743	April 29, 1914
Hamilton, Gilbert B.	Edmonton	2751	May 13, 1914
Hayes, Leslie L.	Lethbridge	2756	May 13, 1914
Hahn, August	Edmonton	2762	May 19, 1914
Harrison, Sidney W.	Okotoks	2778	June 20, 1914
Henderson, William P.	Edmonton	2784	June 22, 1914
Hamilton, Leland S.	Fort Saskatchewan ..	2785	June 22, 1914
Haggarty, James J.	Grouard	2790	July 3, 1914
Hume, Thomas	Calgary	2816	Aug. 22, 1914
Handford, Percy	Innisfail	2821	Sept. 15, 1914
Hibbert, William J.	Medicine Hat	2798	July 18, 1914
Hood, William	Edmonton	2860	Jan. 11, 1915
Heck, Edgar A.	Stettler	2863	Feb. 10, 1915
Haugard, Syver J.	Calgary	2866	Feb. 20, 1915
Harper, John Cameron	Drumheller	2889	April 8, 1915
Houghton, Ernest	Bassano	2892	April 9, 1915
Hogge, Ivan	St. Kilda	2907	April 23, 1915
Hurst, Alfred H.	Nanton	2908	April 23, 1915
Hughes, Thomas	Calgary	2917	May 18, 1915
Harker, Joseph A.	Magrath	2925	June 16, 1915
Hampton, William J. H.	Ardley	2944	Oct. 12, 1915
Hughes, Charles E.	Dinant	2947	Oct. 13, 1915
Haxton, Andrew	Calgary	2950	Oct. 15, 1915
Hill, John E.	Beverly	2961	Dec. 16, 1915
Holmes, John	Coalhurst	2967	Dec. 13, 1915
Hovis, Martin L.	Black Diamond	2968	Dec. 16, 1915
Hughs, Jack	Edmonton	2979	Jan. 10, 1916
Hugy, Alphonse A.	Edmonton	2977	Jan. 10, 1916
Hodgson, Cecil	Viking	3000	April 12, 1916
Harding, Henry F.	Stettler	3004	April 17, 1916
Hall, Frank	Stettler	3008	April 25, 1916
Hamilton, Robert	Redcliff	3022	May 18, 1916
Hertzog, August	Rosenroll	3025	June 12, 1916
Henderson, James E.	Wetaskiwin	3034	Aug. 15, 1916
Harris, James A.	Calgary	3054	Oct. 17, 1916
Hunter, Alex C.	Edmonton	3063	Oct. 24, 1916
Harcus, Wm.	Mountain Park	3077	Nov. 22, 1916

Schedule of Holders of Final Certificates of Qualification under
The Boilers Act.—*Continued.*

NAME	ADDRESS	NO. OF CERT.	DATE OF ISSUE.
<i>Third Class.—Continued.</i>			
Imeson, George	Stony Plain	*206	Dec. 18, 1901
Ibson, Clause W.	Mewassin	*804	Mar. 31, 1905
Isaacson, Frank	Claresholm	191	Aug. 13, 1906
Iverson, Olaf	Molstad	231	Sept. 20, 1906
Isherwood, William	Calgary	588	Mar. 23, 1908
Ingram, William	Leduc	860	Oct. 7, 1908
Isaacson, Willie	Claresholm	969	April 16, 1909
Illingworth, Joseph	Edmonton	983	April 20, 1909
Inglesby, E. C.	Edmonton	1180	Nov. 16, 1909
imler, John V.	Okotoks	1326	April 8, 1910
Ireland, James H.	Blairmore	1629	Mar. 11, 1911
Ingram, Wesley	Tofield	1697	Mar. 31, 1911
Ives, Albert J.	Grassy Lake	1704	Mar. 31, 1911
Ireland, Wm. James	Cardston	1911	Aug. 24, 1911
Iball, William	Kipp	2354	July 19, 1912
Isaacson, Arthur S.	Evarts	514	Oct. 22, 1907
Isaacson, Arthur S.	Evarts	2792	July 14, 1914
Ibey, Charles E.	Taber	2983	Feb. 10, 1916
Jackson, Charles	Bentley	*66	July 19, 1900
Joyner, Charles A.	Calgary	*173	Oct. 2, 1901
James, Dunham D.	Didsbury	*321	Nov. 1, 1902
Jeune, Ivan	Wetaskiwin	*332	Feb. 13, 1903
Jamieson, Johnston	Ponoka	*353	April 24, 1903
Johnson, Conrid	Red Deer	*414	Aug. 29, 1903
Jameson, Charles W.	Ponoka	*644	Oct. 15, 1903
James, F. S.	Ponoka	28	Sept. 16, 1905
Johnson, Elijah	Canyon	61	Dec. 29, 1905
Johnson, Ed.	Diana	99	April 20, 1906
Jenson, Louis C.	Alix	114	April 25, 1906
Jones, Jack	Bankhead	140	May 14, 1906
Johnson, Benj. F.	Raymond	2470	Feb. 19, 1913
Jones, Fred.	Coleman	189	Aug. 13, 1906
Job, Charles	Strathcona	222	Sept. 13, 1906
Jordon, A. H.	Edmonton	271	April 22, 1907
Jesse, E.	Hardisty	284	May 15, 1907
Johnson, G. Anton	Didsbury	316	May 29, 1907
Johanson, Henry	Walsh	328	May 31, 1907
Johnson, Joseph	Medicine Hat	361	June 4, 1907
Jones, Arthur	Camrose	383	June 14, 1907
Johns, Thomas L.	Magrath	459	July 15, 1907
Jamieson, Jesse H.	Edmonton	505	Oct. 15, 1907
Johanson, John T.	Oids	521	Oct. 24, 1907
Journey, Clyde R.	Brant	582	Mar. 22, 1908
Jepson, Walter	Bellevue	612	April 8, 1908
Johnston, Percy W.	Edmonton	713	May 18, 1908
Johnson, Elmer	Daysland	716	May 18, 1908
Julien, Eugene	South Bend	720	May 18, 1908
Johnson, Charles J.	Stavely	832	Oct. 2, 1908
Jensen, Ole E.	Seven Persons	833	Oct. 2, 1908
Jones, Isaac	Raymond	849	Oct. 6, 1908
James, John E.	Taber	850	Oct. 6, 1908
Johnson, Alfred	Hillcrest	917	Mar. 30, 1909
Jackson, Thomas C.	Stettler	962	April 13, 1909
James, Griffith L.	Ponoka	975	April 7, 1909
Jones, Robert	Lethbridge	1103	Sept. 15, 1909

*Indicates Certificate was granted by North-West Territories.

Schedule of Holders of Final Certificates of Qualification under
The Boilers Act.—*Continued.*

NAME	ADDRESS	NO. OF CERT.	DATE OF ISSUE.
<i>Third Class.—Continued.</i>			
Jermaine, Stephen	Andrew	1038	April 29, 1909
Johnson, W. E.	Lethbridge	1058	May 4, 1909
Jones, Arthur W.	Edmonton	1060	May 20, 1909
Johnson, John G.	Millet	1065	May 21, 1909
Jones, William Daniel	Edmonton	3618	May 5, 1916
Johnson, Charles J.	Onoway	1192	Jan. 10, 1910
Jones, William C.	Bow Island	1226	Mar. 25, 1910
Jeanclaude, Leopold	Edmonton	1306	April 6, 1910
Jackson, Roy E.	Queenstown	1327	April 8, 1910
Jordan, Glen L.	Banff	1338	April 11, 1910
Jones, Albert E.	Rosebud Creek	1407	April 19, 1910
Johnsrud, Alfred	Harmattan	1552	Oct. 17, 1910
Johnson, James F., Jr.	Barnwell	1568	Oct. 20, 1910
Jones, Samuel	Lethbridge	2657	Dec. 16, 1913
James, Reginald	Coleman	2823	Sept. 21, 1914
Jensen, Rasmus	Raymond	1681	Mar. 28, 1911
Johnson, Wm. F.	Walsh	2021	Dec. 27, 1911
Jones, Wm. N.	Edmonton	1814	April 18, 1911
Jenkins, James	Coleman	2609	July 18, 1913
Jelly, Alf.	Calgary	1882	July 19, 1911
Johnson, Ellin A.	Calgary	1923	Aug. 26, 1911
Joseph, Orvil E.	Macleod	1935	Sept. 8, 1911
Jantzen, Peter H.	Calgary	1936	Sept. 8, 1911
Johnson, Benj. C.	Magrath	1943	Sept. 9, 1911
Johnson, Joseph	Blackie	2038	Feb. 14, 1912
Johnson, William	Fort Chipewyan	2045	Feb. 22, 1912
Jones, Ray	Calgary	2239	May 1, 1912
Jackson, George Alex	Lignite	2263	May 8, 1912
Jeffry, Philip	Granum	2360	Aug. 14, 1912
Johannsen, Alfred	Calgary	2376	Sept. 19, 1912
Johnson, John Peter	Taber	2399	Oct. 17, 1912
Johnson, Herbert N.	Calgary	2477	Mar. 14, 1913
Jackson, William H.	Markerville	2515	April 11, 1913
John, Thomas	Calgary	2572	May 19, 1913
Johnson, David J.	Peace River Crossing	2826	Sept. 23, 1914
Jones, William H.	Coronation	3005	April 17, 1916
John, F. Charles	Banff	2919	June 11, 1915
James, John Kellogg	Wabamun	2962	Dec. 10, 1915
James, Alfred	Edmonton	5026	June 12, 1916
Jamieson, Charles M.	Drumheller	3038	Aug. 18, 1916
Johnson, Forin E.	Hanna	3068	Nov. 11, 1916
Krause, Otto	Innisfail	*171	Oct. 1, 1901
Kanngiesser, Simon	Lacombe	*512	April 18, 1904
Kelsey, A. F.	Clover Bar	1484	Sept. 2, 1910
Knapp, Henry H.	Edmonton	*645	Oct. 15, 1904
Kerwin, James	Leavings	*748	Mar. 16, 1905
Kolner, Bernard	Millet	*793	Mar. 27, 1905
Klapstein, Ed.	Ellerslie	*49	April 25, 1900
Krouse, Wilhelm	Spruce Grove	*819	April 14, 1905
Kallis, Ed.	Strathcona	*847	May 26, 1905
Knight, Harry P.	Edmonton	2838	Oct. 28, 1914
Krinke, August	Highland Park	46	Sept. 18, 1905
Kerr, John	Calgary	64	Mar. 9, 1906
Kennedy, Dent	Calgary	124	April 30, 1906

*Indicates Certificate was granted by North-West Territories.

Schedule of Holders of Final Certificates of Qualification under
The Boilers Act.—*Continued.*

NAME	ADDRESS	NO. OF CERT.	DATE OF ISSUE.
<i>Third Class.—Continued.</i>			
Karmangel, F. R.	Didsbury	154	May 31, 1906
Kiddle, Thomas M.	Stirling	165	Aug. 11, 1906
Kearney, W. J.	Claresholm	178	Aug. 13, 1906
Kjosness, Peder P.	Martins	217	Sept. 13, 1906
Kendrews, Jos. W.	Edwell	250	Oct. 5, 1906
Krinkle, Benj.	Highland Park	249	Oct. 5, 1906
Knowles, Kenneth E.	Wetaskiwin	264	April 25, 1907
Kremer, David H.	Innisfail	294	May 20, 1907
Kjorsvik, Albert	Eagle Hill	305	May 23, 1907
Kittlitz, Ed.	Bruderheim	329	May 31, 1907
Kenny, John	Calgary	918	Mar. 30, 1909
Knappe, Ernest P.	Calgary	344	June 4, 1907
Keegan, Dan	Morley	355	June 4, 1907
Kreamer, Wm. W.	Strathcona	384	June 14, 1907
Keith, Scott	Taber	551	Dec. 26, 1907
Kniseley, Arthur C.	Standoff	1143	Sept. 21, 1909
Klein, Emil F.	Leduc	669	April 27, 1908
Kadlec, Frank	Wetaskiwin	712	May 18, 1908
Kinne, Fred	Calgary	750	Aug. 28, 1908
Kemp, Robert M.	Ruagh	816	Sept. 28, 1908
Keoster, Carl H.	Granum	834	Oct. 2, 1908
Keeler, Ralph A.	Lethbridge	851	Oct. 6, 1908
Kendrew, John T.	Edwell	888	Mar. 20, 1909
Kalis, Theodore	Edmonton	941	April 2, 1909
King, Charles F.	Macleod	953	April 7, 1909
Knudson, Loues	Killam	1000	April 22, 1909
Knudson, Charles A.	Wetaskiwin	1098	Sept. 10, 1909
King, Benj.	Lethbridge	1227	Mar. 15, 1910
Keffer, J. John	Frank	2707	Mar. 24, 1914
Kitchen, Elroy R.	Cayley	1265	Mar. 24, 1910
Kittlitz, Chrystian	Bruderheim	1307	April 6, 1910
Kneis, Louis	Stony Plain	1308	April 6, 1910
Krutz, John	Calgary	1328	April 8, 1910
Kincade, Jerry	Stirling	1372	April 15, 1910
Klinger, Henry	Calgary	1428	June 14, 1910
Kjosness, Alfred	Martins	1501	Sept. 21, 1910
Kuhl, Edward	Stony Plain	1502	Sept. 21, 1910
Kinnen, Peter	Independence	1509	Sept. 21, 1910
Kruse, Herman	Hastings Coulee	1542	Oct. 7, 1910
Knight, O. L.	Taber	1586	Nov. 17, 1910
Kremper, Ernest	Edmonton	1589	Nov. 23, 1910
Kirkby, Theo.	Lethbridge	1619	Mar. 7, 1911
Kolschorofsky, Ed.	Stony Plain	1698	Mar. 31, 1911
Kirstein, Aug.	Wetaskiwin	1720	April 5, 1911
Klaus, John S.	Gleichen	1739	April 19, 1911
Kincade, Wyet E.	Seven Persons	1796	April 24, 1911
Keller, Fred	Edmonton	2284	Sept. 27, 1912
Kemp, George F.	Calgary	1851	June 13, 1911
Kiviatniowsky, Joe	Heatherwood	1853	June 16, 1911
Klassen, Abm. W.	Acme	1900	Aug. 22, 1911
Kaatz, Ed. A.	Burdett	1912	Aug. 24, 1911
Kelly, John D.	Calgary	1937	Sept. 8, 1911
Kidd, George	Lethbridge	2029	Jan. 16, 1912
Kirkham, John T.	Macleod	2077	Mar. 18, 1912
Kerr, William	Coleman	2079	Mar. 18, 1912
Kilmer, Owen	Suffield	2130	April 4, 1912
Knight, Herbert	Therien	2228	April 29, 1912

Schedule of Holders of Final Certificates of Qualification under
The Boilers Act.—*Continued.*

NAME	ADDRESS	NO. OF CERT.	DATE OF ISSUE.
<i>Third Class.—Continued.</i>			
Kinsella, Charles A.	Strathcona	2316	June 17, 1912
Kerr, John	Calgary	2342	July 18, 1912
Kuhl, Edward	Calgary	2375	Sept. 19, 1912
Kuhl, Edward	Calgary	2466	Feb. 13, 1913
Kirton, Thomas	Edmonton	2461	Feb. 12, 1913
King, George	Okotoks	2478	Mar. 14, 1913
Klentsche, Karl	Medicine Hat	2522	April 15, 1913
King, Archibald	Calgary	2681	Jan. 12, 1914
Kennedy, James	Calgary	2694	Feb. 19, 1914
Keller, Roy B.	Viking	2714	April 2, 1914
Kitchen, Willis E.	Edmonton	2715	April 2, 1914
Keiller, John Wm.	Red Deer	2726	April 16, 1914
Kinrade, John R.	Brooks	2736	April 23, 1914
Kennedy, William	Evansburgh	2739	April 27, 1914
Kane, William	Banff	2759	May 18, 1914
Kinsman, Frederick L.	Calgary	2824	Sept. 21, 1914
Knight, Dan. McK.	Calgary	2882	Mar. 26, 1915
Kane, Norman W.	Calgary	2931	Aug. 17, 1915
Kzindegard, Lars	Innisfree	3009	April 25, 1916
Lamoureux, Alcide	Lamoureux	*96	Nov. 15, 1900
Lee, George	Edmonton	2442	Dec. 20, 1912
Lewis, Wm. H.	Innisfail	*888	Aug. 28, 1905
Lamoureux, Alp.	Lamoureux	*186	Dec. 18, 1902
Loiselle, Jerry	Red Deer	1599	Jan. 4, 1911
Lundy, Wm. Thomas	Innisfail	*227	April 23, 1902
Lynch, Alex. W.	Blairmore	*259	Aug. 18, 1902
Lyseng, Knut K.	Bittern Lake	*390	Aug. 7, 1903
Lindberg, Erick	Calmar	*510	April 18, 1904
Langhausen, Jacob	Fort Saskatchewan ..	*523	April 18, 1904
Langhausen, Peter	Fert Saskatchewan ..	*524	April 18, 1904
Lee, Andrew E.	Wetaskiwin	*525	April 18, 1904
Lehman, Harrison	Edmonton	*564	Feb. 15, 1908
Logan, John	Penhold	*774	Mar. 24, 1905
Logan, Dan	Red Deer	*783	Mar. 24, 1905
Lee, Oscar W.	Wetaskiwin	*788	Mar. 27, 1905
Long, Albert W.	Namoo	36	Sept. 16, 1905
Lindholm, Andrew G. J.	Burnt Lake	60	Dec. 29, 1905
Lee, Albert	Wetaskiwin	97	April 20, 1906
Laine, Francois P.	Bankhead	138	May 14, 1906
Lambe, Alex.	Didsbury	150	May 30, 1906
Linkous, James B.	Raymond	173	Aug. 13, 1906
Lindsay, Samuel D.	Strathcona	212	Sept. 13, 1906
Lennox, James A.	Red Deer	251	Oct. 5, 1906
Luigi, Liega	Lille	256	Dec. 28, 1906
Lawrence, Frederick S.	Fort Vermilion	544	Oct. 29, 1907
Lawrence, Fenwick N.	Edmonton	260	Feb. 23, 1907
Lavoll, Lewis V.	Evarts	290	May 20, 1907
Lancaster, Robert V.	Calgary	736	July 24, 1908
Latam, Myron B.	Content	371	June 7, 1907
Lehman, Sam	Nanton	438	June 19, 1907
Lamoureux, Hermidas	Lamoureux	502	Oct. 15, 1907
Lamoureux, Albert	Lamoureux	503	Oct. 15, 1907
Lewis, Lyman L.	Olds	526	Oct. 24, 1907
Lang, William	Okotoks	566	May 23, 1908
Lyon, Omar	Blayney	571	May 23, 1908

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Schedule of Holders of Final Certificates of Qualification under
The Boilers Act.—*Continued.*

NAME	ADDRESS	NO. OF CERT.	DATE OF ISSUE.
<i>Third Class.—Continued.</i>			
Lee, John A.	Edmonton	592	April 2, 1908
Lee, Lars	Leduc	678	April 27, 1908
Loveless, Peter	Lloydminster	707	May 18, 1908
Lucas, Sam B.	Daysland	719	May 18, 1908
Lansing, George	Leavings	1455	Aug. 2, 1910
Littlefield, Chas. W.	Eagle Hill	909	Mar. 26, 1909
Lehman, Peter L.	Pincher Creek	931	April 1, 1909
Laut, Frank	Ena	945	April 6, 1909
Link, Ronald F.	Lethbridge	960	April 9, 1909
Lunn, Edward	Stettler	963	April 13, 1909
Lewis, Isaac H.	Killam	1001	April 22, 1909
Long, George S.	Namoo	1039	April 29, 1909
Lunder, Andrew H.	Westeros	1045	April 30, 1909
Leonard, James F.	Seven Persons	1049	May 1, 1909
Larson, Edwin H.	Seven Persons	1050	May 1, 1909
Lindsey, Horace F.	Strathcona	1075	May 26, 1909
Larson, Harry	Langdon	1079	June 1, 1909
LaBonte, Fred	Calgary	1125	Sept. 21, 1909
Laventure, Arthur	Beaumont	1146	Sept. 25, 1909
Lawrence, Herman M.	Ross Creek	1162	Sept. 29, 1909
Long, Herbert Wm.	Calgary	1187	Dec. 17, 1909
Lawrence, Sheridan	Fort Vermilion	741	Aug. 6, 1908
Laroux, Oliver	Chipewyan	742	Aug. 6, 1908
Lloyd, Roy A.	Carstairs	761	Sept. 11, 1908
Love, Thomas	Hicksburg	835	Oct. 2, 1908
Lindsay, Alvan A.	Calgary	1598	Jan. 6, 1911
Long, Henry G.	Calgary	1450	July 15, 1910
Long, Henry G.	Calgary	1208	Mar. 7, 1910
Lewis, George H.	Calgary	1209	Mar. 7, 1910
Low, Ralph E.	Carmangay	1276	Mar. 29, 1910
Lloyd, John W.	Stavely	1277	Mar. 29, 1910
Lotan, Herbert N.	Strome	1289	April 1, 1910
Lindquest, Nils W.	Riviere Qui Barre ..	2996	April 6, 1916
Leblanc, Raoul	Mayton	1332	April 9, 1910
Lawrella, Michael	Bankhead	1339	April 11, 1910
Lindman, W. L.	Milk River	1359	April 14, 1910
Longacre, Fred.	Taber	1373	April 15, 1910
Levisque, Walter	Medicine Hat	1395	April 25, 1910
Lunn, Arthur B.	Calgary	1401	April 26, 1910
Long, James W.	Calgary	1408	May 19, 1910
Lane, Lewis W.	Bowville	1425	June 11, 1910
Long, Fred.	Beiseker	1433	June 14, 1910
Lockhart, Wm.	Kipp	1479	Sept. 1, 1910
Lithgow, John	Reid Hill	1488	Sept. 6, 1910
Lorerm, John	Edmonton	1509	Sept. 24, 1910
Lightall, George B.	Bassano	1524	Sept. 23, 1910
Lambert, Arthur	Redcliff	1533	Sept. 24, 1910
LeGear, Russell C.	Wetaskiwin	1543	Oct. 7, 1910
Lindsay, Robert	Lethbridge	1620	Mar. 7, 1911
Labby, Alfred	La Calmette	1770	April 21, 1911
Lycan, Thomas S.	Bassano	1740	April 10, 1911
Lysham, J. E.	Taber	1756	April 15, 1911
Lambert, John A.	Taber	1785	April 24, 1911
Lee, Ed. A.	Calgary	1809	May 8, 1911
Laughery, James W.	Calgary	1821	May 20, 1911
Lister, Ossie	Lethbridge	1832	May 26, 1911
Pepard, Frank	Edmonton	1387	Aug. 11, 1911

Schedule of Holders of Final Certificates of Qualification under
The Boilers Act.—*Continued.*

NAME	ADDRESS	NO. OF CERT.	DATE OF ISSUE.
<i>Third Class.—Continued.</i>			
Lake, Arch.	Calgary	1901	Aug. 22, 1911
Lee, John J.	Rosemead	1913	Aug. 24, 1911
Little, Wm. H.	Lethbridge	1344	Sept. 9, 1911
Lambert, Wm. E.	Diamond City	1980	Oct. 24, 1911
Lewis, Gilbert B.	Granum	1984	Oct. 24, 1911
Lefort, Henry	Taber	2013	Dec. 19, 1911
Levis, Everett E.	St. Albert	2024	Jan. 12, 1912
Lacquement, Edward C.	Yetwood	2031	Jan. 16, 1912
Lough, Marshall	Calgary	2039	Feb. 14, 1912
Lewis, Fred	Reaver Creek	2080	Mar. 18, 1912
Linton, William H.	Parkland	2092	Mar. 22, 1912
Lagasse, John L.	Edson	2102	Mar. 25, 1912
Lippold, Herman	Cardston	2157	April 19, 1912
Long, Charles W.	Medicine Hat	2180	April 23, 1912
Lippert, Jacob	Irvine	2181	April 23, 1912
Loritz, Frank	Strathcona	2218	April 29, 1912
Levy, Ira M.	Aubion Ridge	2246	May 2, 1912
Lohrman, Chris.	Halkirk	2256	May 3, 1912
Lundh, Bernard	Claresholm	2306	June 14, 1912
Little, Wm. John	Strathcona	3020	May 16, 1916
Lee, William O.	Youngstown	2411	Oct. 23, 1912
Lerbeckmo, Peter O.	Bardo	2428	Dec. 13, 1912
Lindquist, Carl	Edmonton	2462	Feb. 12, 1913
Lain, John Theo.	Edmonton	2848	Dec. 11, 1914
Lee, William S.	Edmonton	587	Aug. 2, 1904
Lees, Edward	Edmonton	2633	Sept. 25, 1913
Lindsay, Charles B.	Greenshields	2740	April 27, 1914
Lamont, Hugh	Peace River Crossing	2760	Mar. 5, 1914
Lechlietner, Frank	Edmonton	2763	May 19, 1914
Lechlietner, A. Hugh	Edmonton	2764	May 19, 1914
Larson, Harry	Munson	2833	Oct. 20, 1914
Leeming, James	Calgary	2929	July 14, 1915
Linlater, Andrew	Edmonton	2978	Jan. 10, 1916
Leblanc, Fred.	Entwistle	3010	April 25, 1916
Laundry, Ray	Edmonton	3027	June 12, 1916
Lutz, Wm. H.	Edmonton	3042	Aug. 24, 1916
Lewis, Geo. W.	Athabasca	3051	Oct. 12, 1916
Lunn, John W.	Lethbridge	3086	Dec. 11, 1916
Morkin, John	Dunbow	*39	Dec. 1, 1899
Martin, M. Z.	Morinville (susp.) ..	*56	May 28, 1900
Mitchell, Tim W.	Red Deer	*119	Feb. 7, 1901
Mather, E. M.	Calgary	*123	June 6, 1901
Morden, Jacob R.	Lacombe	*187	Dec. 18, 1901
Moore, John R.	Innisfail	*190	Dec. 18, 1901
Munier, Wilfred	Stony Plain	*199	Dec. 18, 1901
Miller, Philip	Morinville	*201	Dec. 18, 1901
Meneely, Wm.	Edmonton	*204	Dec. 18, 1901
Mikethus, Michael	Leduc	*210	Dec. 18, 1901
Morkeberg, D.	Innisfail	*232	April 23, 1902
Martin, Henry E.	Wardner	*854	June 13, 1905
Mooney, W. S.	Lacombe	*513	April 18, 1904
Murray, A. A.	St. Albert	*536	April 18, 1904
Meunier, J. H.	Morinville	*537	April 18, 1904
Meredith, Wilbert	Edmonton	*538	April 18, 1904
Mathews, George	Strathcona	*636	Oct. 15, 1904

*Indicates Certificate was granted by North-West Territories.

Schedule of Holders of Final Certificates of Qualification under
The Boilers Act.—*Continued.*

NAME	ADDRESS	NO. OF CERT.	DATE OF ISSUE.
<i>Third Class.—Continued.</i>			
Morgan, Oscar	Strathcona	*643	Oct. 15, 1904
Maxfield, W. H.	Namoo	*646	Oct. 15, 1904
Mead, Francis A.	Pincher Creek	*678	Dec. 30, 1904
May, Daniel	Blairmore	*681	Jan. 21, 1905
Mew, John	Calgary	*750	Mar. 24, 1905
Muir, William J.	Ponoka	1959	Sept. 23, 1911
Marler, Walter	Clover Bar	*799	Mar. 31, 1905
Mohr, John J.	Edmonton	*870	July 6, 1905
Morel, H. F.	Edmonton	37	Sept. 16, 1905
Melnyk, William	Star	40	Sept. 18, 1905
Mason, James D.	Clover Bar	43	Sept. 18, 1905
Moss, Richard	Edmonton	*81	Mar. 26, 1905
Mahood, Robert F.	Buford	94	April 11, 1906
Murray, Dan L.	Bentley	105	April 24, 1906
Mitchell, Joseph C.	Tees	111	April 25, 1906
Moritz, Henry C.	Olds	146	May 31, 1906
Moritz, Louis J. A.	Olds	148	May 31, 1906
Morkeberg, Holger	Markerville	157	May 31, 1906
Maxwell, Tim	Claresholm	180	Aug. 13, 1906
Murray, Thomas N.	Medicine Hat	171	Aug. 11, 1906
Muir, George A.	Morrissey	877	Feb. 1, 1909
Maunchaw, Aug.	Strathcona	218	Sept. 13, 1906
Mead, Wm.	Edmonton	221	Sept. 13, 1906
Maxfield, George A.	Namoo	236	Sept. 13, 1906
Miller, Dick F.	Blackfalds	241	Sept. 27, 1906
Malcher, Charles	Wetaskiwin	246	Oct. 5, 1906
Miller, Jones P.	Delnorte	334	May 31, 1907
Morrison, Avarid L.	Calgary	348	June 4, 1907
Martin, John C. B.	Calgary	2768	June 11, 1914
Moody, James Wm.	Brocket	363	June 4, 1907
Morter, Charles J.	Icwalta	2490	Mar. 20, 1913
Miller, William H.	Brant	420	June 19, 1907
Morrow, Joseph W.	Roundup	460	July 15, 1907
Meldrum, David (Jr.)	Raymond	466	July 15, 1907
Manning, James A.	Cowley	471	July 16, 1907
Munro, Milo	Gleichen	484	Aug. 28, 1907
Martin, Charles A.	High River	487	Sept. 4, 1907
Miller, Fred C.	Cooking Lake	496	Oct. 15, 1907
Munro, Fred	Innisfail	510	Oct. 22, 1907
Morden, John	Lacombe	925	Mar. 30, 1909
Malchow, G. E. A.	Earlville	538	Oct. 28, 1907
Mignault, Joseph C.	Calgary	579	Mar. 23, 1908
Middleton, Archie C.	Nanton	583	Mar. 23, 1908
Marshall, Frank P.	Spring Point	600	April 8, 1908
May, Alex. S.	Lisle	1631	Mar. 7, 1911
Millar, T. B.	Burnt Lake	641	April 14, 1908
Marson, Charles H.	Medicine Hat (dup.) ..	735	July 15, 1908
Mitchell, Franklin A.	Medicine Hat	664	April 27, 1908
Miles, James	Vermilion	667	April 27, 1908
Mark, David McK.	Mannville	1189	Dec. 29, 1909
Marler, James T.	Crossfield	683	May 1, 1908
Martin, Landis	Stettler	686	May 1, 1908
Millar, John F.	Bentley	694	May 6, 1908
Munro, Alex. A.	Lockhart	696	May 6, 1908
Morris, Wm. H.	Wetaskiwin	698	May 6, 1908
Maurice, Frank E.	Edmonton	730	May 26, 1908

*Indicates Certificate was granted by North-West Territories.

Schedule of Holders of Final Certificates of Qualification under
The Boilers Act.—*Continued.*

NAME	ADDRESS	NO. OF CERT.	DATE OF ISSUE.
Third Class.— <i>Continued.</i>			
Maxwell, John W.	Cochrane	731	June 12, 1908
Morris, James E.	Lochend	732	June 29, 1908
Morris, James W.	Canmore	734	June 29, 1908
Morton, Lewis R.	Athabasca Landing ..	745	Aug. 6, 1908
Mott, Henry J.	Red Deer	2760	May 18, 1914
Murray, James	Murray Valley	757	Sept. 8, 1908
Masse, Louis	Legal	788	Sept. 21, 1908
Mulligan, George B.	Bon Accord	789	Sept. 21, 1908
Miller, Jacob	Stony Plain	790	Sept. 21, 1908
Marshall, Robert E.	Raymond	852	Oct. 6, 1908
Murphy, Edward F.	Strathcona	875	Jan. 8, 1909
Morris, Andrew	Calgary	882	Mar. 19, 1909
Mitchell, Ava D.	Aldersyde	935	April 2, 1909
Munson, James B.	Raid Hill	936	April 2, 1909
Moore, Corey G.	Macleod	954	April 7, 1909
Mudiman, David L.	Macleod	955	April 8, 1909
Myers, James	Claresholm	970	April 16, 1909
Myers, Roy C.	Claresholm	971	April 16, 1909
Mundell, Wm. G. R.	Lethbridge	1054	May 3, 1909
Monson, Joseph	Camrose	1092	Sept. 7, 1909
Miller, James	Diamond City	1104	Sept. 15, 1909
Marr, Robert	Edmonton	1164	Sept. 29, 1909
Miller, Herman A.	Edmonton	1175	Oct. 27, 1909
Morris, John	Wild Horse	1177	Nov. 13, 1909
Muirhead, James W.	Calgary	1210	Mar. 7, 1910
Mitchell, Wesley C.	Calgary	1211	Mar. 7, 1910
Morningstar, Roy	Lethbridge	1229	Mar. 15, 1910
Martin, Wm. A.	Lethbridge	1230	Mar. 15, 1910
Malchow, Fred C.	Claresholm	1278	Mar. 29, 1910
Mach, Jos.	Camrose	1291	April 1, 1910
Mildon, Wm. L.	Ponoka	2981	Feb. 10, 1916
Mueller, Mike M.	Warner	1361	April 14, 1910
Mahood, C. J.	New Dayton	1362	April 14, 1910
Mayberry Wm.	Warner	1363	April 14, 1910
Mitchell, Wm.	Calgary	1386	April 21, 1910
Miles, John	Lethbridge	1388	April 22, 1910
Merkel, Jacob F.	Irvine	1396	April 25, 1910
Morley, Wm. N.	Morningside	1405	Mar. 17, 1910
Mogridge, John Jas.	Copeville	1420	June 9, 1910
Molton, Earl	Calgary	1464	Aug. 29, 1910
Michaelis, Eddie	Milk River	1481	Sept. 1, 1910
Marshall, Wm. J.	Calgary	1525	Sept. 23, 1910
Malcolm, Roy	Calgary	1526	Sept. 23, 1910
Moses, George	Medicine Hat	1534	Sept. 24, 1910
Muir, George H.	Ponoka	1982	Oct. 24, 1911
Matson, Charles	Calgary	1577	Oct 20, 1910
Mudra, Charles	Frank	2081	Mar. 18, 1912
Matheson, Murdoch R.	Granum	1645	Mar. 15, 1911
Musser, Angus	Bassano	1654	Mar. 20, 1911
Mansell, Wm.	Canmore	1741	April 10, 1911
Moran, George I.	Langdon	1766	April 19, 1911
Martin, Wm.	Sandstone	2573	May 19, 1913
Martin, A. W.	Taber	1786	April 24, 1911
Maker, Edgar L.	Seven Persons	1787	April 24, 1911
Malton, John W.	Calgary	1806	May 6, 1911
Murrell, Vasco E.	Hardisty	1810	May 13, 1911
Melanson, Norman M.	Edmonton	1815	May 18, 1911

Schedule of Holders of Final Certificates of Qualification under
The Boilers Act.—*Continued.*

NAME	ADDRESS	NO. OF CERT.	DATE OF ISSUE.
<i>Third Class.—Continued.</i>			
Mattison, Fred	Blairmore	1834	May 26, 1911
Murphy, Matthew	Granum	1835	May 26, 1911
Mayberry, J. R.	Red Deer	1855	June 17, 1911
Mah, Sam	Edmonton	1871	July 12, 1911
Miller, Wm. G.	Ryley	1893	Aug. 16, 1911
Merrit, Ezra M.	Noble	1914	Aug. 24, 1911
Milligan, John L.	Burdett	1920	Aug. 25, 1911
Mickleson, George A.	Calgary	2041	Feb. 14, 1912
Miniekler, John	Calgary	1925	Aug. 26, 1911
Morrison, Wm. V.	Red Deer	1930	Sept. 7, 1911
Miller, Edward S.	Spring Coulee	1945	Sept. 9, 1911
Mel drum, John C.	Lethbridge	1947	Sept. 9, 1911
Mullin, James	Edmonton	1955	Sept. 9, 1911
Mildren, Wm. George	Airdrie	1972	Oct. 20, 1911
Morgan, Jacob	Lethbridge	1981	Oct. 24, 1911
Melle, Ed. L.	Carlstadt	1994	Nov. 16, 1911
Melnyk, Fred	Star	2049	Feb. 23, 1912
Murray, Wm. B.	Magrath	2062	Mar. 13, 1912
Miller, Henry J.	Cloresholm	2063	Mar. 13, 1912
Malchow, Max E.	Stavely	2645	Nov. 11, 1913
Morris, Ernest	Gladys	2111	Mar. 28, 1912
Mikshus, John	Leduc	2115	April 1, 1912
Meiklejohn, Lindsay	Provost	2144	April 10, 1912
Montgomery, George	Clover Bar	2233	April 29, 1912
Miller, Clarence H.	Raymond	2247	May 2, 1912
Moore, Wm. C.	Elkton	2257	May 3, 1912
Mills, Edward H.	Bentley	2258	May 3, 1912
Martin, Arthur	St. Paul des Metis ..	2324	July 12, 1912
Massicotte, Omer	St. Paul des Metis ..	2325	July 12, 1912
Mullock, James I.	Edmonton	2334	July 16, 1912
Manning, Timothy	Calgary	2343	July 18, 1912
Miller, Charles C.	Calgary	2344	July 18, 1912
Murphree, Wm. N.	Calgary	2245	July 18, 1912
Moulton, August	Clover Bar	2359	Aug. 12, 1912
Miller, Alex.	Bassano	2363	Aug. 20, 1912
Murray, Thomas H.	Medicine Hat	2400	Oct. 17, 1912
Mitchell, Geo. Henry	Calgary	2406	Oct. 19, 1912
Mackwood, Samuel	Lethbridge	2419	Nov. 13, 1912
Miller, Ellis G.	Edmonton	2429	Dec. 13, 1912
May, Albert	Bellevue	2433	Dec. 13, 1912
Mallott, Bernard B.	Calgary	2452	Jan. 15, 1913
Miller, David	Diamond City	2472	Feb. 19, 1913
Mack, Wilfred	Round Hill	2500	Mar. 28, 1913
Miller, Gilbert	Hillcrest	2544	April 23, 1913
Mowat, James	Medicine Hat	2566	May 15, 1913
Moore, James	Lethbridge	2568	May 15, 1913
Mitchell, Walter J. B.	Edmonton	2577	May 20, 1913
Murdock, George	Bassano	2771	June 17, 1914
Moller, George	Wainwright	2663	Dec. 17, 1913
Main, William R.	Calgary	2669	Dec. 17, 1913
Mjolsness, Alfred	Didsbury	2839	Nov. 14, 1914
Milton, Charles	Calgary	2696	Feb. 19, 1914
Moynes, Frederick	Medicine Hat	2702	Mar. 16, 1914
Marvin, Walter	Drumheller	3019	May 16, 1916
Martin, Henry F. A.	Edmonton South	2730	April 17, 1914
Marsh, George H.	Edmonton	2745	April 29, 1914
Murphy, Albert E.	Edmonton	2752	May 13, 1914

Schedule of Holders of Final Certificates of Qualification under
The Boilers Act.—*Continued.*

NAME	ADDRESS	NO. OF CERT.	DATE OF ISSUE.
<i>Third Class.—Continued.</i>			
Mould, Samuel	Calgary	2799	July 18, 1914
Mills, Clinton Guy	Calgary	2800	July 18, 1914
Meitzler, Clarence E.	Peace River Crossing	2802	July 25, 1914
Moses, Gilbert R.	Lethbridge	2807	Aug. 12, 1914
Martin, Joseph A.	Edmonton	2829	Sept. 30, 1914
Makepeace, Walter C.	Banff	2836	Oct. 20, 1914
Murphy, Francis	Calgary	2846	Nov. 23, 1914
Mischkowsky, August	Wetaskiwin	2865	Feb. 12, 1915
Milstead, Frederick B.	Coronation	2868	Mar. 12, 1915
Miller, William	Drumheller	2891	April 8, 1915
Matz, Odey	Edmonton	2893	April 10, 1915
Milne, George K.	Calgary	2909	April 23, 1915
Moses, Edwin	Medicine Hat	2920	June 11, 1915
Morrell, George	Calgary	2958	Nov. 20, 1915
Maxwell, James M.	Edmonton	3001	April 12, 1916
Mould, Jos.	Calgary	3013	April 27, 1916
Miller, J. W.	Edmonton	3065	Oct. 24, 1916
Milligan, Thos. W.	Edmonton	3066	Oct. 24, 1916
Mogense, Mogens C.	Claresholm	3071	Nov. 13, 1916
Moody, Homer M.	Rochester	3073	Nov. 14, 1916
Marsh, John	Innisfree	3079	Nov. 27, 1916
McKernan, James	Edmonton	*28	Oct. 9, 1899
McDonald, Findlay	Sturgeon	*86	Oct. 23, 1900
McLellan, John	Fort Saskatchewan ..	*93	Nov. 15, 1900
McLeod, M. J.	Fort Saskatchewan ..	*94	Nov. 15, 1900
McKellar, John	Fort Saskatchewan ..	*95	Nov. 15, 1900
McKinley, Murdoch	Stony Plain	*203	Dec. 18, 1901
McLean, Archibald	Lethbridge	*250	Aug. 18, 1902
McLean, Alix M.	Calgary	*247	Mar. 9, 1902
McGarry, Fred	Lacombe	*355	April 24, 1903
McDonald, Wm.	Penhold	*369	May 13, 1903
McConnell, James R.	Red Deer	*372	May 13, 1903
McLean, James A.	Star	*539	April 18, 1904
McDiarmid, A. D.	Edmonton	*540	April 18, 1904
McFayden, John R.	Strathcona	*553	June 3, 1904
McDonald, Malcolm	Mountain Hill	*594	Sept. 14, 1904
McLeod, D. J. W.	Strathcona	766	Sept. 11, 1908
McKenzie, Dan	Lacombe	*760	Mar. 24, 1905
McInroy, Paul	Edwell	*773	Mar. 24, 1905
McEachern, Malcolm	Leduc	*792	Mar. 27, 1905
McCathy, James	Calmar	*793	Mar. 27, 1905
McDonald, Dan	Morinville	66	Mar. 16, 1906
McCallum, Albert W.	Beaver Lake	95	April 18, 1906
McAnnaly, Peter J.	Crossfield	153	May 31, 1906
McLean, Wm. John	Hillcrest	188	Aug. 13, 1906
McPherson, James P.	Bentley	1416	May 23, 1910
McNutt, Watson	Medicine Hat	262	April 6, 1907
McCune, Oscar	Red Deer	289	May 20, 1907
McGregor, Wm. W.	Blackfalds	293	May 20, 1907
McDonnell, Archie A.	Calgary	339	June 4, 1907
McIvor, David S.	Marwayne	388	June 14, 1907
McWhirter, James A.	Camrose	408	June 14, 1907
McAllister, Donald C.	Lethbridge	1088	Aug. 20, 1909
McAllister, Alfred	Claresholm	468	July 15, 1907

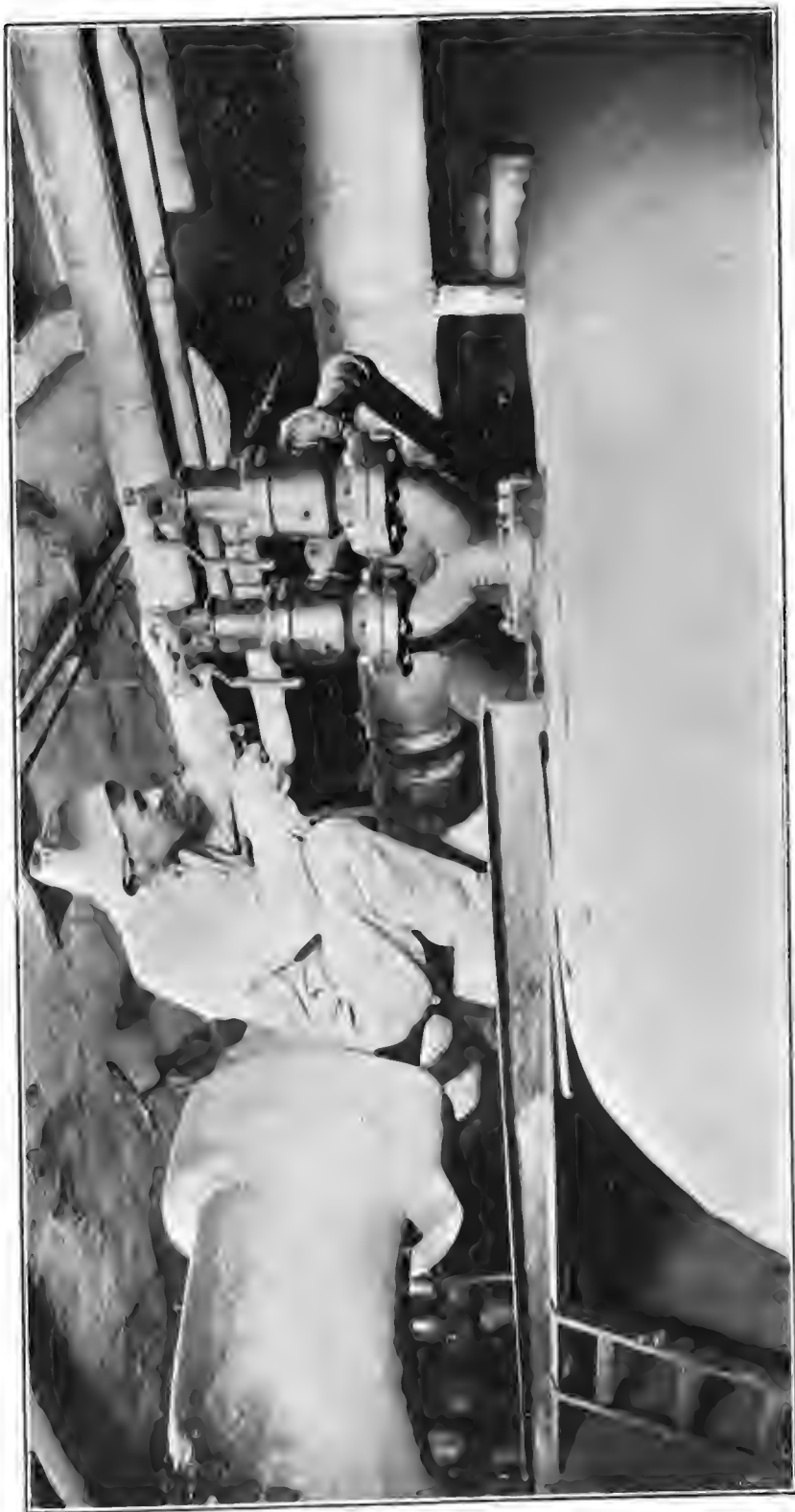
*Indicates Certificate was granted by North-West Territories.

Schedule of Holders of Final Certificates of Qualification under
The Boilers Act.—*Continued.*

NAME	ADDRESS	NO. OF CERT.	DATE OF ISSUE.
<i>Third Class.—Continued.</i>			
McGhan, Silas S.	Clover Bar	493	Oct. 15, 1907
McLean, Laughlin	Innisfail	512	Oct. 22, 1907
McGuire, Thomas	Lacombe	535	Oct. 28, 1907
McLean, Garnet W.	Calgary	558	Jan. 20, 1908
McPhee, John	Edmonton	596	April 2, 1908
McDonald, Hugh D.	Frank	605	April 8, 1908
McCutcheon, B. H.	Pincher Creek	631	April 9, 1908
McRae, Duncan A.	Taber	633	April 9, 1908
McRoberts, And.	Pine Lake	644	April 14, 1908
McDougall, Wm.	Mewassin	655	April 22, 1908
McIvor, Wm.	Marwayne	668	April 27, 1908
McDermid, Alex. M.	Elkwater	703	May 14, 1908
McIntosh, Duncan D.	Three Hills	795	Sept. 22, 1908
McCall, Samuel D.	Pincher Creek	932	April 1, 1909
McPherson, Jabez B.	Bentley	946	April 6, 1909
McKenzie, John A.	Edmonton	1067	May 21, 1909
McPherson, Adam	Red Deer	1089	Aug. 24, 1909
McKenzie, George	Lethbridge	1106	Sept. 15, 1909
McKenzie, Wesley J.	Brant	1537	Sept. 28, 1910
McCausland, Charles A.	Calgary	1973	Oct. 20, 1911
McCallum, Jos.	Beaver Lake	1163	Sept. 29, 1909
McAllister, Donald C.	Diamond City	1228	Mar. 15, 1910
McLaughlin, Lorne	Cardiff	1310	April 8, 1910
McLaughlin, Wm. E.	Okotoks	1329	April 8, 1910
McGibbon, Robert F.	Taber	1374	April 15, 1910
McCauley, Charles	New Dayton	1426	June 11, 1910
McBlane, Donald	Cowley	1427	June 11, 1910
McPherson, John	Calgary	2209	April 26, 1912
McTighe, Frank B.	Lethbridge	1437	July 8, 1910
McKenna, Felix	Cochrane	1449	July 15, 1910
McPherson, Alec	Blairmore	1470	Aug. 21, 1910
McLeod, James W.	Leslieville	1516	Sept. 21, 1910
McLeod, John B.	Innisfail	1517	Sept. 21, 1910
McGlenn, Lester S.	Lethbridge	1569	Oct. 20, 1910
McDonald, William F.	Lethbridge	1570	Oct. 19, 1910
McAuley, Dan	Kipp	3064	Oct. 24, 1916
MacKay, Duncan	Sandstone	2671	Dec. 17, 1913
McLean, James	Edmonton	1667	Mar. 25, 1911
McMullen, Alp. L.	Raymond	1682	Mar. 28, 1911
McLeod, Angus	Stettler	1721	April 5, 1911
McLaughlin, James M.	Bassano	1742	April 10, 1911
McLean, Hugh	Cummings	1771	April 21, 1911
McLean, Niven P.	Belseker	1807	May 6, 1911
McGlen, Robert M.	Lethbridge	1833	May 26, 1911
McDermand, Charles C.	Alix	1854	June 17, 1911
McKerricher, W. R.	Pincher Creek	1864	June 20, 1911
McCrae, Ern A.	Lethbridge	1865	June 20, 1911
McLaughlin, Elmer	Edmonton	1896	Aug. 18, 1911
McClennand, Allen	Fishburn	1946	Sept. 9, 1911
McCarthy, James S.	Hand Hills	1995	Nov. 16, 1911
McAlduff, Edward	Camrose	2684	Feb. 3, 1914
McCall, Frank M.	Red Willow	2040	Feb. 14, 1912
McLellan, Murdoch	Edmonton	2048	Feb. 23, 1912
McDonald, Robert A.	Lethbridge	2121	April 2, 1912
McMahon, James F.	Pleasington	2143	April 10, 1912
McDaniel, Hugh C.	Whitla	2182	April 22, 1912



GAUGING A CORRUGATED FURNACE WHEN UNDER TEST PRESSURE.



ADJUSTING AND SEALING SAFETY VALVE AFTER INSPECTION.



BOILER ROOM OF THE MACDONALD HOTEL, EDMONTON.

Schedule of Holders of Final Certificates of Qualification under
The Boilers Act.—*Continued.*

NAME	ADDRESS	NO. OF CERT.	DATE OF ISSUE.
<i>Third Class.—Continued.</i>			
McInnis, William	Cummings	2222	April 29, 1912
McDonald, Wm. A.	Wainwright	2234	April 29, 1912
McRitchie, Murray	Coleman	2267	May 18, 1912
McMillen, Allan D.	Edmonton	2954	Nov. 9, 1915
McClintock, Warren	St. Albert	2317	June 17, 1912
McDonald, Charles E.	Edmonton	2318	June 17, 1912
MacAuley, William	St. Paul des Metis	2332	July 16, 1912
McCann, John A.	Calgary	2364	Aug. 20, 1912
McDevitt, Wm. J.	Edmonton	2386	Sept. 27, 1912
McDonald, Angus	Edmonton	2387	Sept. 27, 1912
McTavish, Hugh R.	Fort Saskatchewan	2413	Nov. 8, 1912
McInroy, John C.	Innisfail	1555	Oct. 17, 1910
McInroy, John C.	Innisfail	2453	Jan. 24, 1913
McCutcheon, William	Edmonton South	2047	Feb. 23, 1912
McCutcheon, William	Edmonton South	2786	June 22, 1914
McMichael, Ernest W.	Calgary	2467	Feb. 13, 1913
McIntosh, Harry	Cardston	2471	Feb. 19, 1913
McIntee, James	Beaver Mines	2487	Mar. 19, 1913
McCarthy, William	Entwistle	2493	Mar. 26, 1913
McDevitt, James J.	Torfield	2553	May 3, 1913
McClellan, Daniel	Entwistle	2576	May 20, 1913
McKay, Charles	Macleod	2587	June 19, 1913
McGinnis, James	Burmis	2834	Oct. 20, 1913
McCulloch, Wm. H.	Lundbreck	2658	Dec. 16, 1913
McKenzie, David A.	Edmonton	2677	Jan. 12, 1914
McNeil, Duncan	Bassano	2695	Feb. 19, 1914
McCartney, Grant	Edmonton	2744	April 29, 1914
McCubbins, Charles H.	Brooks	2754	May 13, 1914
McDonald, John	Beaver Mines	2776	June 17, 1914
Mcltae, Daniel	Vermilion	2793	July 16, 1914
MacKenzie, Roderick	Edmonton	2811	Aug. 17, 1914
McLeod, William J.	Calgary	2817	Aug. 22, 1914
McNeill, Rowland E.	Ogden	2835	Oct. 20, 1914
McCrae, Richard	Edmonton	2849	Dec. 11, 1914
McCracken, Thomas	Clover Bar	2850	Dec. 11, 1914
McDonald, George A.	Pincher Creek	454	July 15, 1907
McDonald, George A.	Pincher Creek	2874	Mar. 23, 1915
McKay, Ray A.	Stettler	2856	Jan. 8, 1915
McGregor, James	Cardiff	2902	April 20, 1915
McDonald, Floyd J.	Kinnaird	2903	April 20, 1915
McKee, George H.	High River	2910	April 23, 1915
McLaren, Alex.	Nordeg	2913	May 7, 1915
McGregor, Allan B.	Edmonton South	2935	Aug. 24, 1915
McCarther, Sidney	Drumheller	2943	Sept. 28, 1915
McGibbern, Wilfred	Drumheller	3055	Oct. 17, 1916
McDonald, Wm. John	Edmonton	2959	Dec. 7, 1915
McPherson, Gray A.	High River	2991	Mar. 29, 1916
McSwan, Malcolm	Edmonton	3011	April 25, 1916
McKechie, David	Edmonton	3017	May 1, 1916
McQueen, Fred William	Redcliff	3049	Sept. 14, 1916
McMahon, Harry E.	Edmonton	3078	Nov. 22, 1916
Nelson, Frank	Wetaskiwin	*60	May 30, 1900
Nichol, David	Innisfail	*191	Dec. 18, 1901
Noyes, Dan E.	St. Albert	*197	Dec. 18, 1901

*Indicates Certificate was granted by North-West Territories.

**Schedule of Holders of Final Certificates of Qualification under
The Boilers Act.—Continued.**

NAME	ADDRESS	NO. OF CERT.	DATE OF ISSUE.
<i>Third Class.—Continued.</i>			
Nichols, James J.	Edmonton	*358	May 13, 1903
Niven, John	Lethbridge	451	Oct. 6, 1903
Nehr, William A.	Edmonton	75	Mar. 26, 1906
Nehr, Henry R.	Edmonton	245	Sept. 28, 1906
Noel, Kenneth E.	Canyon	113	April 25, 1906
Nelson, Wilfred	Calgary	119	April 30, 1906
Nelson, Arthur W.	Edmonton	132	May 10, 1906
Neeb, Louis	Edmonton	151	June 5, 1906
Nichols, Alex. J.	Edmonton	220	Sept. 13, 1906
Neis, George M.	Lamerton	228	Sept. 20, 1906
Norlie, Hackon C.	Edmonton	501	Oct. 15, 1907
Nixon, Robert J.	Crossfield	524	Oct. 24, 1907
Neis, Philip	Lamerton	530	Oct. 24, 1907
Neilson, George	Haynes	540	Oct. 28, 1907
Nadeau, T. Eudore	Lavoy	675	April 27, 1908
Nichols, Wm. R.	Edmonton	729	May 26, 1908
Neufeld, Abraham J.	Neapolis	762	Sept. 11, 1908
Neufeld, Peter W.	Noelton	763	Sept. 11, 1908
Neate, Harry	Edmonton	779	Sept. 18, 1908
Newsome, Wm. H.	Calgary	796	Sept. 22, 1908
Norgaard, Peter J.	Calgary	797	Sept. 22, 1908
Norton, Paul	Reid Hill	836	Oct. 2, 1908
Nemsgern, John	Claresholm	837	Oct. 2, 1908
Neville, Fred R.	Mountain View	853	Oct. 6, 1908
Norrie, James	Medicine Hat	1051	May 1, 1909
Nelson, Peter L.	Amisk	1093	Sept. 7, 1909
Naylor, Edward H.	Morinville	1165	Sept. 29, 1909
Nelson, Christ	Medicine Hat	1186	Dec. 17, 1909
Nicholson, John M.	Lundbreck	1253	Mar. 21, 1910
Neil, N. Walter	Coleman	1471	Aug. 31, 1910
Needham, Harry H.	Edmonton	1606	Jan. 23, 1911
Noble, William John	High River	1656	Mar. 20, 1911
Nelson, Willard T.	Sunnyslope	1722	April 5, 1911
Nichols, John D.	Lethbridge	1788	April 24, 1911
Nelson, Joseph	Brant	2112	Mar. 28, 1912
Noland, Lars	Cardston	2122	April 2, 1912
Nelson, Charles F.	Bonnie Glen	2145	April 10, 1912
Nelson, Ernest W.	Calgary	2210	April 26, 1912
Neufeld, Abram W.	Noelton	2259	May 3, 1912
Neggerson, Edward	Calgary	2279	May 22, 1912
Nelson, Earl Alex.	Calgary	2365	Aug. 20, 1912
Nickerson, Joseph H.	Strome	2578	May 20, 1913
Nicholls, Milton P.	Edmonton	*740	Mar. 16, 1905
Nagel, Philip	Edmonton	2753	May 13, 1914
Nicolaeff, Nicholas	Morningside	2869	Mar. 12, 1915
Norman, James Henry	Cochrane	2879	Mar. 26, 1915
Neilson, George	Lake Thelma	2898	April 16, 1915
Nicholson, William B.	Carlstadt	2918	May 18, 1915
Nicholson, George	Forest Lawn	2952	Oct. 25, 1915
North, W. Everard	Cardiff	2976	Jan. 10, 1916
Neese, Carl E.	Ferintosh	3006	April 17, 1916
Ottewell, Richard P.	Edmonton	*27	Oct. 9, 1899
Omand, John	Edmonton	*522	April 14, 1904
Olsen, H. B.	Elleslie	*542	April 18, 1904

*Indicates Certificate was granted by North-West Territories.

Schedule of Holders of Final Certificates of Qualification under
The Boilers Act.—Continued.

NAME	ADDRESS	NO. OF CERT.	DATE OF ISSUE.
<i>Third Class.—Continued.</i>			
Oliver, Wesley N.	Wostoki	*814	April 14, 1905
Olsen, Gilbert E.	Star	2358	Aug. 8, 1912
Ottewell, Albert	Clover Bar	77	Mar. 26, 1906
O'Dell, George W.	High River	733	June 22, 1908
Oxford, Andrew B.	Macleod	478	July 15, 1907
Oberg, Knute L.	Strathcona	491	Oct. 15, 1907
Oliver, Peter C.	Calgary	562	Jan. 20, 1908
Oakes, Louis D.	Claresholm	567	Mar. 23, 1908
O'Connor, John	Mossleigh	568	Mar. 28, 1908
Oler, George, Jr.	Stirling	602	April 8, 1908
Orser, John R.	Tristram	1333	April 9, 1910
O'Reilly, C.	Bells Hill	784	Sept. 18, 1908
Olson, Matz	Wilton Park	817	Sept. 28, 1908
Oster, Carl	Good Hope	818	Sept. 28, 1908
Orr, Alfred E.	Irvine	854	Oct. 6, 1908
Osborne, Homer	Taber	855	Oct. 6, 1908
Olson, Elmer A.	Prairie View	891	Mar. 24, 1909
Ostby, Anton	Strathmore	1027	April 28, 1909
O'Brien, Roy	Raymond	1107	Sept. 15, 1909
Orr, Joshua	Irvine	1154	Sept. 28, 1909
Ostlund, Gustav	Stirling	1231	Mar. 15, 1910
O'Connell, Patrick B.	Raymond	1317	April 7, 1910
Ohlson, Carl L.	Millarville	1409	May 19, 1910
Ohrn, Carl H.	Ohrnville	1557	Oct. 17, 1910
Oman, Carl A.	Stettler	1675	Mar. 24, 1911
Ostby, Charles	Milk River	1688	Mar. 29, 1911
Ormson, Joseph J.	Ryley	1699	Mar. 31, 1911
Oliver, Robert T.	Grassy Lake	1705	Mar. 31, 1915
O'Connor, Pat J.	Carlstadt	1744	April 10, 1911
Odell, Ed.	Calgary	1822	May 20, 1911
Ottewell, Arthur J.	Clover Bar	1894	Aug. 16, 1911
Olsen, J. Gilbert	Burdett	1915	Aug. 24, 1911
Olson, Albert Joseph	Coleman	2030	Jan. 16, 1912
O'Daniels, John W.	Caldale	2064	Mar. 13, 1912
O'Rourke, John O.	Irma	2104	Mar. 25, 1912
Olberg, Christian	Holden	2199	April 24, 1912
O'Neil, Thomas A.	Mile 43	2238	April 30, 1912
Ottewell, William R.	Clover Bar	2264	May 8, 1912
Olson, Frank Oscar	Calgary	2346	July 18, 1912
Oxford, Stephen	Edmonton	2388	Sept. 27, 1912
Oaks, John W.	Edmonton	2430	Dec. 13, 1912
Orvold, Arne E.	Redcliff	2475	Mar. 10, 1913
O'Neil, Edward	Kananaskis	2511	April 7, 1913
O'Hara, Charles R.	Edmonton	2620	Aug. 21, 1913
Ogden, Herman E.	Pincher Creek	2708	Mar. 24, 1914
Oliver, William	Calgary	2697	Feb. 19, 1914
O'Hara, Arthur J.	Camangay	2721	April 15, 1914
Ousman, Joel	Calgary	2779	June 20, 1914
Orr, Ernest Joseph	Edmonton	2851	Dec. 11, 1914
O'Connell, James	N. Edmonton	2914	May 12, 1915
O'Sullivan, Pat	Bankhead	2932	Aug. 19, 1915
O'Neal, Frank E.	Edmonton	2936	Aug. 24, 1915
Olson, Ole M.	Blairmore	2610	July 18, 1913
Olson, Ole M.	Blairmore	3056	Oct. 18, 1916

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Schedule of Holders of Final Certificates of Qualification under
The Boilers Act.—*Continued.*

NAME	ADDRESS	NO. OF CERT.	DATE OF ISSUE.
<i>Third Class.—Continued.</i>			
Pierce, George J.	Red Deer	*46	Mar. 8, 1900
Pearce, James	Edmonton	*87	Oct. 23, 1900
Putman, Albert E.	Edmonton	*202	Dec. 18, 1901
Powell, James A.	Edmonton	*208	Dec. 18, 1901
Pearce, William	Edmonton	*229	April 23, 1902
Pimm, John	Lethbridge	*258	Aug. 18, 1902
Pullshiy, William	Star	*384	June 23, 1903
Pullesen, Peter	Calgary	*492	Mar. 14, 1904
Piper, F. E.	Red Deer	*546	April 18, 1904
Porter, Gerard A.	Red Deer (dup.)	*851	June 6, 1905
Peterson, Robert F.	Wetaskiwin	*789	Mar. 27, 1905
Pipegrass, Frederick	Raymond	24	Sept. 16, 1905
Pearson, Herbert S.	Red Deer	62	Dec. 29, 1905
Pflugger, George	Wetaskiwin	98	April 20, 1906
Peterson, Martin E.	Claresholm	179	Aug. 13, 1906
Pitmann, Wm. T.	Wetaskiwin	279	May 15, 1907
Pratt, Arthur W.	Three Hills	300	May 23, 1907
Patterson, Johnston	Strathcona	308	May 23, 1907
Pyle, Joshua	Langdon	354	June 4, 1907
Peterson, Alfred L.	Heatherbrae	397	June 14, 1907
Phillips, Fred H.	Frank	476	July 15, 1907
Pylypow, Wasyl	Star	504	Oct. 15, 1907
Prehn, Emil N.	Strome	508	Oct. 15, 1907
Peterson, Fred A.	Wetaskiwin	529	Oct. 28, 1907
Page, Sam James	Lacombe	532	Oct. 28, 1907
Pethick, Roy W.	Okotoks	1331	April 8, 1910
Pozin, Otto E.	Claresholm	577	Mar. 23, 1908
Peat, George A.	Lethbridge	611	April 8, 1908
Power, Eugene	Lethbridge	615	April 8, 1908
Peat, James T.	Lethbridge	619	April 8, 1908
Phillips, Walter I.	Magrath	620	April 9, 1908
Peters, Andy	Blairmore	621	April 9, 1908
Peterson, Anton	Evarts	638	April 14, 1908
Piersall, Wm. S.	Harmattan	646	April 14, 1908
Putnam, Orlean E.	Edmonton	666	April 27, 1908
Pail, Jos., Jr.	Prague	717	May 18, 1908
Phillips, Wm. J.	Clover Bar	725	May 18, 1908
Papineau, Francis C.	Battle Lake	727	May 18, 1908
Parker, David L.	Penhold	753	Sept. 3, 1908
Parmelee, J. M.	Bluff Centre	771	Sept. 14, 1908
Park, Hugh A.	Placington	785	Sept. 18, 1908
Parsons, Harry	Okotoks	2542	April 23, 1913
Philpot, Joseph	Bawlf	807	Sept. 25, 1908
Podgarmy, Mike	Leduc	819	Sept. 28, 1908
Porter, Wm.	Stavely	838	Oct. 2, 1908
Peak, Joseph H.	Pokahasset	870	Nov. 26, 1908
Payzant, John M.	Edmonton	873	Dec. 23, 1908
Paul, Karl	Strathcona	880	Mar. 4, 1909
Prout, Thomas R.	Medicine Hat	904	Mar. 26, 1909
Peterson, Martin O.	Hicksburg	937	April 2, 1909
Passmore, Thos. A.	Content	964	April 13, 1909
Pouillot, Emil E.	Taber	1014	April 25, 1909
Pickering, George	Canmore	1030	April 28, 1909
Pierce, Alfred	Lamont	1040	April 29, 1909
Parsons, Henry	Lac Ste. Anne	1041	April 29, 1909
Purmal, Jacob	Medicine Hat	1052	May 1, 1909
Paget, Thomas J.	Claresholm	1128	Sept. 21, 1909
Piper, T. J.	Calgary	1212	Mar. 7, 1910

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Schedule of Holders of Final Certificates of Qualification under
The Boilers Act.—*Continued.*

NAME	ADDRESS	NO. OF CERT.	DATE OF ISSUE.
<i>Third Class.—Continued.</i>			
Powell, John	Lucky Strike	1233	Mar. 15, 1910
Paulsons, Paul	Lethbridge	1236	Mar. 15, 1910
Pattinson, George	Frank	1254	Mar. 21, 1910
Parkin, David	Macleod	1268	Mar. 28, 1910
Pipegrass, Valdemar	Raymond	1318	April 7, 1910
Pearson, Richard V.	Okotoks	1330	April 8, 1910
Puntas, Frank	Airdrie	1340	April 11, 1910
Paradis, Felix	Tofield	1349	April 13, 1910
Parker, John W.	Row Island	1379	April 19, 1910
Perks, Charles	High River	1410	April 19, 1910
Phillips, William	Calgary	1451	July 15, 1910
Purcell, Frank	Taber	1510	Sept. 21, 1910
Peterson, Emil	Heatherbrae	1538	Sept. 28, 1910
Parker, Ralph A.	Lewisville	1544	Oct. 7, 1910
Potter, John	Royton	1553	Oct. 17, 1910
Pearce, Gilbert E.	Edmonton	3089	Dec. 26, 1916
Parson, Howard E.	Pine Creek	1604	Jan. 20, 1911
Pike, Fred G.	Edmonton	1668	Mar. 22, 1911
Pederson, S. M.	Warner	1689	Mar. 29, 1911
Prouty, Hiram	Lost Lake	1706	Mar. 31, 1911
Peterson, Soreng	Hand Hills	1745	April 10, 1911
Porter, J. E.	Medicine Hat	1757	April 15, 1911
Parnell, Fred K.	Medicine Hat	1758	April 15, 1911
Phillips, Harvey G.	Cardiff	1772	April 21, 1911
Pratt, Wm. W.	Ponoka	1856	June 17, 1911
Pomarleau, Louis	Burdett	1857	June 20, 1911
Potter, Thomas	Raymond	1866	June 20, 1911
Palmer, Henry A.	Calgary	1902	Aug. 22, 1911
Pradon, Jean M.	Strathcona	1921	Aug. 25, 1911
Peterson, Peter	Warner	1948	Sept. 9, 1911
Parro, Louis	Iacombe	1990	Nov. 11, 1911
Pratt, Fred	Lethbridge	2002	Nov. 17, 1911
Prought, Donald G.	Elm Park	2010	Dec. 12, 1911
Palar, Henry	Warner	2065	Mar. 13, 1912
Perdue, Nelson	Tofield	2103	Mar. 25, 1912
Pittman, John W.	Warner	2151	April 16, 1912
Pease, Fred	Milk River	2152	April 16, 1912
Pratt, Fred	Camrose	2169	April 20, 1912
Porter, Charles B.	Medicine Hat	2183	April 23, 1912
Putnam, Philetus	Claresholm	2248	May 2, 1912
Patton, John P.	Blairmore	2268	May 18, 1912
Parkening, Amil	Tilley	2347	July 18, 1912
Pettley, Daniel R.	Taber	2626	Sept. 18, 1913
Pinckney, Fred	Medicine Hat	2371	Sept. 17, 1912
Pentzer, Henry W.	Calgary	2374	Sept. 19, 1912
Porter, Joshua	Wetaskiwin	2417	Nov. 12, 1912
Pilgrim, Henry Howard	Edmonton	2431	Dec. 13, 1912
Palmer, Raymond N.	Calgary	2439	Dec. 18, 1912
Paterson, Peter	Edmonton	2767	May 20, 1914
Porter, John, Jr.	Edmonton	2495	Mar. 26, 1913
Peterson, Leroy	Cardston	2503	Mar. 31, 1913
Purington, Bert S.	Bassano	2512	April 7, 1913
Polkinghorne, Wm.	Calgary	2912	May 6, 1915
Peabody, Harvey M.	Calgary	2535	April 21, 1913
Patterson, James B.	Calgary	2551	April 26, 1913
Pennock, Frank	Edmonton	2555	May 3, 1913
Prout, Arra T.	Neapolis	2563	May 12, 1913
Peterson, Elmer	Coleman	2588	June 19, 1913
Palmer, Charles G.	Magrath	2589	June 19, 1913
Pennicuick, Albert E.	Edmonton	2619	Aug. 21, 1913

Schedule of Holders of Final Certificates of Qualification under
The Boilers Act.—*Continued.*

NAME	ADDRESS	NO. OF CERT.	DATE OF ISSUE.
<i>Third Class.—Continued.</i>			
Parks, Guy J.	Edmonton	2639	Oct. 22, 1913
Parker, Robert W.	Bickerdike	2665	Dec. 17, 1913
Pozzi, Rinaldo	Frank	2705	Mar. 24, 1914
Phillips, William	Bankhead	2720	April 6, 1914
Peterson, Alfred H.	Camrose	2727	April 16, 1914
Padden, Thomas	Medicine Hat	2772	June 17, 1914
Poole, Arthur J.	Edmonton	2787	June 27, 1914
Parken, William H.	Calgary	2801	July 18, 1914
Parkin, Walter	Calgary	2825	Sept. 21, 1914
Prout, James Lorne	Medicine Hat	2870	Mar. 15, 1915
Pearson, William	Mitford	2880	Mar. 26, 1915
Peter, John F.	Edmonton	2883	April 5, 1915
Pon Wong	Edmonton	2937	Aug. 24, 1915
Paddy, Wm. Henry	Calgary	2969	Dec. 16, 1915
Poxon, John	Carbon	3014	April 27, 1916
Pennycook, Daniel	Yeoford	3043	April 24, 1916
Quigley, Thomas	Cochrane	546	Nov. 22, 1907
Quinn, Wm. B.	Edmonton	1188	Dec. 27, 1909
Quick, Elbert K.	Sundial	1237	Mar. 15, 1910
Quesseth, George O.	Meeting Creek	1435	July 6, 1910
Quinlan, John A.	Hillcrest	2082	Mar. 18, 1912
Quick, Nels	Whitla	2188	April 23, 1912
Quissy, Fred J.	Edmonton	2766	May 19, 1914
Robinson, John	Edmonton	*26	Oct. 9, 1899
Rutherford, John	Medicine Hat	1549	Oct. 17, 1910
Ross, Thomas G.	Poplar Lake	*97	Nov. 15, 1900
Rattray, Archie B.	Edmonton	*108	Dec. 15, 1900
Rafie, Andrew	Bon Accord	*301	Oct. 2, 1902
Ryan, James	Wetaskiwin	*316	Oct. 22, 1902
Redig, Valentin	Lacombe	*514	April 18, 1904
Rivet, Arthur	Morinville	*549	May 26, 1904
Ramsay, James	Coleman	620	Oct. 7, 1905
Rice, George A.	Strathcona	39	Sept. 18, 1905
Rath, Edw. L.	Conjuring Creek	93	April 11, 1906
Read, Edgar A.	Manfred	102	April 20, 1906
Reese, Harry E.	Wetaskiwin	137	May 10, 1906
Roulston, Robert	Bowden	160	May 31, 1906
Roberge, Wm.	Vegreville	215	Sept. 13, 1906
Rorem, T. A.	Duhamel	1760	April 18, 1911
Rockstad, Abraham	Wetaskiwin	247	May 15, 1907
Rath, Ernest W.	Conjuring Creek	277	May 15, 1907
Royle, Wm. H.	Calgary	347	June 4, 1907
Ramey, Morgan	Vegreville	382	June 14, 1907
Reay, John G.	Lamerton	391	June 14, 1907
Robinson, N. J.	DeWinton	425	June 19, 1907
Rydberg, Emil W.	Glenview	432	June 19, 1907
Richards, Wm.	Luribreck	920	Mar. 30, 1909
Rice, Wm.	Andrew	500	Oct. 15, 1907
Rear, Charles W.	Mayton	645	April 14, 1908
Raymer, Oliver	Didsbury	653	April 15, 1908
Russell, Charles O.	Brockville	695	May 6, 1908
Ramsey, Ralph H.	Vegreville	722	May 18, 1908
Rix, Percy H.	Wetaskiwin	728	May 26, 1908
Rattray, Alex.	Dog Pound	764	Sept. 11, 1908
Rude, John N.	Priddis	804	Sept. 22, 1908
Reid, James Robert	Claresholm	839	Oct. 2, 1908
Rigby, Wm. T.	Claresholm	840	Oct. 2, 1908

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Schedule of Holders of Final Certificates of Qualification under
The Boilers Act.—Continued.

NAME	ADDRESS	NO. OF CERT.	DATE OF ISSUE.
Third Class.—Continued.			
Rills, Wilson H.	Claresholm	841	Oct. 2, 1908
Richards, Neal S.	Aetna	857	Oct. 6, 1908
Rattray, Thos. A., Jr.	Edmonton	*550	May 26, 1904
Ritchie, John	Calgary	884	Mar. 19, 1909
Rothwell, John T.	Lethbridge	896	Mar. 24, 1909
Robinson, William	Edmonton	940	April 3, 1909
Russell, John	Gaetz Valley	947	April 6, 1909
Rice, Augustus M.	Carmanagay	972	April 16, 1909
Riches, Charles B.	Edmonton	3058	Oct. 23, 1916
Redshaw, Arthur R.	Lethbridge	1055	May 3, 1909
Robinson, H. M.	Lethbridge	1059	May 4, 1909
Rundgren, John S.	Edmonton	1076	May 26, 1909
Robertson, Frank E.	Gleichen	1130	Sept. 21, 1909
Roy, Joseph R.	Stony Plain	1147	Sept. 25, 1909
Reimer, Henry H.	Neapolis	1200	Mar. 4, 1910
Romeil, George H.	Stirling	1238	Mar. 15, 1910
Reilly, Thomas	Coal City	1239	Mar. 15, 1910
Richards, Peter W.	Lethbridge	1240	Mar. 15, 1910
Rice, Aaron, R.	Claresholm	1279	Mar. 29, 1910
Ross, John P.	Granum	1282	Mar. 30, 1910
Reed, David	Rimbey	1294	April 1, 1910
Robertson, George H.	Hamilton	1397	April 25, 1910
Ritchie, Wm. O.	Strathcona	1444	July 14, 1910
Roberts, Edward Ivor	Strathcona	1445	July 14, 1910
Rhimes, Robert	Calgary	1458	Aug. 8, 1910
Roth, Charles	Strome	1461	Aug. 15, 1910
Robertson, Mark W.	Kitscoty	1462	Aug. 24, 1910
Reid, John E.	Eagle Butte	1535	Sept. 24, 1910
Robertson, Alex.	Calgary	1600	Jan. 13, 1911
Reed, Edwin L.	Passburg	1603	Jan. 14, 1911
Remington, Otto C.	Milk River	1690	Mar. 29, 1911
Restall, Fred	Bassano	1746	April 10, 1911
Rolfson, Sam G.	Comrey	1789	April 24, 1911
Rorney, Andrew	Noble	1790	April 24, 1911
Rauds, Harry	Macleod	1791	April 24, 1911
Radway, Orlando S.	Radway Centre	1816	May 18, 1911
Rawson, George	Suffield	1836	May 26, 1911
Rolfe, Lyman	Bow Island	1867	June 20, 1911
Raw, Frank	Calgary	1883	July 19, 1911
Richfield, Floyd I.	Macleod	1917	Aug. 24, 1911
Rice, Martin	Grassy Lake	1949	Sept. 9, 1911
Radloff, Adolff	Edmonton	1965	Oct. 18, 1911
Richards, Thomas	Calgary	2042	Feb. 14, 1912
Ramsay, Wm. John	Lethbridge	2066	Mar. 13, 1912
Roland, George	Lille	2083	Mar. 18, 1912
Rich, George	Granum	2094	Mar. 22, 1912
Robertson, Mark W.	Cardiff	2105	Mar. 25, 1912
Ramsay, Robert	Strathcona	2116	April 1, 1912
Rasmussen, Arnold	Standard	2134	April 4, 1912
Reynolds, George P.	Perintosh	2170	April 20, 1912
Roman, Ned	Thelma	2184	April 23, 1912
Reed, Guy	Irma	2200	April 24, 1912
Ross, Wm. Hope	Calgary	3029	June 13, 1916
Roberts, John	Calgary	2212	April 26, 1912
Rowell, James	Calgary	2213	April 26, 1912
Rizzuto, Thomas	Edmonton	2221	April 29, 1912
Reedholm, Victor	Edmonton	2237	April 30, 1912
Ross, Robert McKay	Innisfail	2260	May 3, 1912
Robinson, Miles H.	Calgary	2281	May 22, 1912

*Indicates Certificate was granted by North-West Territories.

Schedule of Holders of Final Certificates of Qualification under
The Boilers Act.—*Continued.*

NAME	ADDRESS	NO. OF CERT.	DATE OF ISSUE.
<i>Third Class.—Continued.</i>			
Rutherford, Chas. E.	Bickerdike	2788	June 22, 1914
Roberts, David O.	Strathcona	2292	May 29, 1912
Rhodes, Edgar	Calgary	2302	June 11, 1912
Rich, Lewis R.	Brochet	2307	June 14, 1912
Ritchie, John R.	Athabasca Landing ..	2323	June 28, 1912
Robinson, Elwin D.	St. Albert	2397	Sept. 20, 1912
Rimmer, George	Calgary	2440	Dec. 18, 1912
Rhoads, George	Calgary	2479	Mar. 14, 1913
Rogers, James Ed.	Macleod	2489	Mar. 19, 1913
Rintoul, Alex.	Taber	2506	April 3, 1913
Robillard, Archie	Bassano	2536	April 21, 1913
Rogers, Clifford R.	Edmonton	2557	May 3, 1913
Richardson, Tom	Edmonton	2580	May 20, 1913
Ride, George Ed.	Cardston	2590	June 19, 1913
Riddell, William E.	Edmonton	2599	June 21, 1913
Rhoades, Fred N.	Pincher Creek	2634	Oct. 9, 1913
Richards, Alfred	Laggan	2668	Dec. 17, 1913
Robertson, James W.	Calgary	*862	June 15, 1905
Ross, Robert McK.	Innisfail	2701	Mar. 12, 1914
Robertson, Donald	Medicine Hat	2737	April 23, 1914
Ross, Nolan N.	Edmonton	2894	April 10, 1915
Ratcliff, Albert Jos.	P. R. Crossing	2973	Jan. 5, 1916
Robertson, Robt. D.	Calgary	2974	Jan. 8, 1916
Roach, James L.	Medicine Hat	2986	Mar. 13, 1916
Robinson, George L.	Coutts	3081	Dec. 8, 1916
Rockwell, John E.	Cardiff	2997	April 6, 1916
Raynolds, George A.	Black Diamond	3038	Aug. 18, 1916
Roberts, William	Edmonton	3047	Sept. 14, 1916
Ritchie, Warner	Edmonton	3067	Oct. 25, 1916
Stadelbaur, Simon	Spruce Grove	*4	Sept. 18, 1899
Stewart, Thomas H.	Strathcona	*30	Oct. 9, 1899
Smith, Wm. F.	Athabasca Landing ..	*38	Nov. 28, 1899
Shaw, John Y.	Midnapore	*40	Dec. 1, 1899
Saunders, Elias T.	Lethbridge	*47	Mar. 23, 1900
Snider, John B.	Okotoks	*68	July 19, 1900
Steffes, Ferdinand	Morinville	*90	Nov. 15, 1900
Schlegel, Frank	Duhamel	*118	Jan. 26, 1901
Stewart, Archie	Edmonton	*161	Sept. 7, 1901
Stulz, Frank	St. Albert	3069	Nov. 11, 1916
Steffes, Jos.	Morinville	*91	Nov. 15, 1900
Simpson, Robert N.	Edmonton	*198	Dec. 18, 1901
Smith, Sam W.	Vegreville	*228	April 23, 1902
Still, Wm.	Leduc	*328	Dec. 18, 1902
Stewart, James A.	Beaver Lake	*329	Dec. 18, 1902
Shields, Wm. K.	Strathcona	*363	May 13, 1903
Smith, Larent E.	Ponoka	*387	July 13, 1904
Schatz, Robert	Strathcona	*635	Oct. 15, 1904
Swift, W. L.	Edmonton	*647	Oct. 15, 1904
Sloan, Wm. J.	Calgary	145	May 29, 1906
Swingle, Walter A.	Didsbury	*751	Mar. 24, 1905
Scott, George W.	Innisfail	*758	Mar. 24, 1905
Spannel, John	Leduc	*796	Mar. 27, 1905
Scott, Sam R.	Olds	*797	Mar. 28, 1905
Stafford, John	Solman	*817	April 14, 1905
Short, Walker	Mewassin	*826	May 13, 1905
Schull, Angelo	Lille	1453	Aug. 25, 1910
Skouson, Z. N.	Raymond	21	Sept. 16, 1905
Skouson, Peter N.	Raymond	25	Sept. 16, 1905

*Indicates Certificate was granted by North-West Territories.

Schedule of Holders of Final Certificates of Qualification under
The Boilers Act.—*Continued.*

NAME	ADDRESS	NO. OF CERT.	DATE OF ISSUE.
<i>Third Class.—Continued.</i>			
Sherwood, L. H.	Beaumont	29	Sept. 18, 1905
Swedfeger, Amos	Leduc	41	Sept. 18, 1905
Svarich, Peter	Kolomea	76	Mar. 26, 1906
Suru, John	Edmonton	78	Mar. 26, 1906
Schroeder, Ed. H.	High River	120	April 30, 1906
Sherlin, Adam	Red Deer	128	Mar. 4, 1906
Smith, Charles W.	Foreman	131	May 10, 1906
Stephenson, James McC. .	Innisfail	155	May 31, 1906
Speakman, Alfred	Penhold	159	May 31, 1906
Sanders, T. Aaron	Cardston	166	Aug. 11, 1906
Stephens, James	Frank	175	Aug. 13, 1906
Stannk, Isadore	Frank	176	Aug. 13, 1906
Stillman, George F.	Spring Point	181	Aug. 13, 1906
Stuckney, Richard	Pincher Creek	185	Aug. 13, 1906
Scribner, Joseph	Leavings	190	Aug. 13, 1906
Smith, Joseph H.	Nanton	195	Aug. 13, 1906
Stevens, H. E.	Macleod	202	Aug. 13, 1906
Somerset, Robert N.	Vermilion	210	Sept. 13, 1906
Smith, John	Pakan	211	Sept. 13, 1906
Small, Jesse J.	Didsbury	243	Sept. 26, 1906
Scarth, Walter	Calgary	254	Dec. 1, 1906
Santroek, J. M.	Edmonton	269	April 29, 1907
Sorenson, Nels G.	Kellman	263	May 15, 1907
Smith, Charles A.	Red Deer	285	May 15, 1907
Smith, Sam T.	Leslieville	287	May 20, 1907
Schmidt, Henry W.	Red Deer	288	May 20, 1907
Salzl, Rudolph	Morinville	307	May 23, 1907
Swingle, Gala R.	Didsbury	310	May 29, 1907
Scott, William	Three Hills	321	May 29, 1907
Stagg, John C.	Calgary	805	Sept. 22, 1908
Stearns, Charles A.	Carstairs	356	June 4, 1907
Siddall, Wm. M.	Neapolis	360	June 4, 1907
Saunders, Abraham	Lacombe	372	June 7, 1907
Stevens, Clostin H.	Erskine	378	June 7, 1907
Swan, John	Wessington	379	June 7, 1907
Scoville, Wm. A.	Earling	413	June 14, 1907
Schattschneider, Herman .	Ellerslie	415	June 14, 1907
Sinclair, Donald	Cayley	422	June 19, 1907
Sallendach, Robert	Brant	427	June 19, 1907
Sparrow, James W.	Lethbridge	440	June 20, 1907
Stuenkel, James F.	Claresholm	452	July 15, 1907
Svean, Ole	Claresholm	483	Aug. 13, 1907
Salmon, John F.	Raymond	458	July 15, 1907
Spencer, John H.	Medicine Hat	480	July 24, 1907
Somerset, Thomas B.	Edmonton	494	Oct. 15, 1907
Santroek, Harvey S.	Edmonton	498	Oct. 15, 1907
Skolitzky, John J.	Calgary	520	Oct. 24, 1907
Spreeman, Allen	Didsbury	522	Oct. 24, 1907
Skirkey, John W.	Lacombe	534	Oct. 28, 1907
Simmonds, Henry	Banff	547	Nov. 26, 1907
Stanworth, Stephen	Bankhead	549	Dec. 5, 1907
St. George, Stephen	Macleod	604	April 8, 1908
Schroeder, Waldemer	Macleod	607	April 8, 1908
Simpson, David A.	Macleod	622	April 9, 1908
Sorenson, Willard	Leavitt	629	April 9, 1908
Speight, Frank	Red Deer	637	April 14, 1908
Sawatzky, Bernard P.	Didsbury	650	April 15, 1908
Slater, Alfred	Medicine Hat	661	April 27, 1908
Saunders, Wallace	Conjuring Creek	674	April 27, 1908
Stearns, Harvey N.	Innisfree	679	April 27, 1908

Schedule of Holders of Final Certificates of Qualification under
The Boilers Act.—*Continued.*

NAME	ADDRESS	NO. OF CERT.	DATE OF ISSUE.
<i>Third Class.—Continued.</i>			
Scoonover, Frank	Content	688	May 1, 1908
Story, Hillard M.	Talbot	692	May 6, 1908
Stinson, Fred	Hasting Coulee	706	May 18, 1908
Svarich, And.	Vegreville	723	May 18, 1908
Snyder, Jacob F.	Magrath	749	Aug. 26, 1908
Stephen, J. G.	Edmonton	780	Sept. 18, 1908
Shandro, Andrew S.	Shandro	822	Sept. 28, 1908
Stafford, Geo. F.	Pincher Creek	858	Oct. 6, 1908
Steinhauer, Augustine	Saddle Lake	866	Oct. 27, 1908
Smith, Anthony A.	Knee Hill	889	Mar. 20, 1909
Steeves, Lorne W.	Lethbridge	894	Mar. 24, 1909
Schwartz, Chas.	Lille	921	Mar. 30, 1909
Suitor, Wm.	Gladys	938	April 2, 1909
Stroud, W. D.	Crossfield	948	April 6, 1909
States, John G.	Carstairs	949	April 6, 1909
Smedstad, John	Claresholm	973	April 16, 1909
Schumers, Louis	Willing	992	April 20, 1909
Stern, Louis	Bawlf	1002	April 22, 1909
Stenborg, Fred	Harland	1003	April 22, 1909
Snyder, Chas. G.	Calgary	1028	April 28, 1909
Scott, Geo. T.	Gleichen	1029	April 28, 1909
Scarr, Jos. A.	Bankhead	1342	April 11, 1910
Sampert, Julius	Bruderheim	1042	April 29, 1909
Scott, Fred	Strathcona	2611	July 22, 1913
Schaumleffel, John	Lloydminster	1069	May 21, 1909
Stein, Philip	Lethbridge	1073	May 26, 1909
Stubbs, Albert W.	Medicine Hat	1082	June 18, 1909
Scarfe, Wm. H. T.	Innisfail	1090	Aug. 24, 1909
Sheppard, Frank H.	Wetaskiwin	1096	Sept. 7, 1909
Samis, Chas.	Calgary	1132	Sept. 21, 1909
Schench, Wm. A.	Thigh Hill	1133	Sept. 21, 1909
Simon, Herbert	Nanton	1134	Sept. 21, 1909
Sommersgill, Robt.	Calgary	1135	Sept. 21, 1909
Spencer, Fred	Cardston	1141	Sept. 24, 1909
Smith, John	Kitscoty	1148	Sept. 25, 1909
St. John, Myron	Edmonton	1166	Sept. 29, 1909
Sinclair, Clarence	Coaldale	1242	Mar. 15, 1910
Smith, Leslie E.	Lethbridge	1243	Mar. 15, 1910
Schinnour, Gustav	Grassy Lake	1244	Mar. 15, 1910
Stuckney, Wilfred F.	Pincher Creek	1262	Mar. 21, 1910
Sheffield, Geo.	MacLeod	1269	Mar. 28, 1910
Story, Nelson	Lacombe	1295	April 1, 1910
Snyder, Perry	Pakan	1311	April 6, 1910
Symon, Lindsay	Edmonton	1811	May 16, 1911
Sayville, Walter G.	Calgary	1341	April 11, 1910
Steven, Robt. T.	Strathcona	1350	April 13, 1910
Sparks, Geo. A.	Edmonton	2926	July 13, 1915
Smith, Oscar H.	Lethbridge	1364	April 14, 1910
Stone, Wm. N.	Langdon	1380	April 21, 1910
Spencer, Geo.	Calgary	1402	April 28, 1910
Silver, John A.	Lethbridge	1413	May 21, 1910
Stallworthy, Wm.	Calgary	1430	June 14, 1910
Savage, Wm. John	Cardston	1438	July 8, 1910
Smith, Henry	Calgary	1456	Aug. 4, 1910
Selwood, Wm. H.	Welsdale	1463	Aug. 24, 1910
Scott, Michael D.	Cayley	1489	Sept. 6, 1910
Sand, Oscar L.	Dina	1505	Sept. 21, 1910
Stewart, Wm. A.	Gilpin	1506	Sept. 21, 1910
Spencer, Thomas E.	Wetaskiwin	1545	Oct. 7, 1910
Shantz, Alson S.	Didsbury	1554	Oct. 17, 1910

Schedule of Holders of Final Certificates of Qualification under
The Boilers Act.—*Continued.*

NAME	ADDRESS	NO. OF CERT.	DATE OF ISSUE.
Third Class.— <i>Continued.</i>			
Stobbs, Henry	Medicine Hat	3087	Dec. 11, 1916
Smith, John K.	Calgary	1576	Oct. 20, 1910
Smeltzer, Geo. E.	Taber	2160	April 19, 1912
Steeves, Robert	Cleaverville	1540	Oct. 3, 1910
Steeves, Robert	Cleaverville	1841	May 26, 1911
Synder, Amasa	Edmonton	1607	Jan. 23, 1911
St. Peter, Moses	Macleod	1639	Mar. 15, 1911
Snyder, Clarence E.	Pincher Creek	1640	Mar. 15, 1911
Stilling, Samuel K.	Three Hills	1658	Mar. 20, 1911
Stilling, Samuel K.	Three Hills	2682	June 13, 1914
Sergeant, Ed. D.	Calgary	1659	Mar. 20, 1911
Saunders, Charles O.	Okotoks	1660	Mar. 20, 1911
Stanley, Sans E.	Calgary	1661	Mar. 20, 1911
Sheardown, Henry	Lorraine	1676	Mar. 24, 1911
Solie, Helbert L.	Warner	1691	Mar. 29, 1911
Sweet, Charles	Grassy Lake	1707	Mar. 31, 1911
Smyrick, Jos.	Grassy Lake	1708	Mar. 31, 1911
Stephens, S. E.	Ponoka	2501	Mar. 28, 1913
Skallin, Olof	Pretty Hill	1724	April 5, 1911
Shernak, Charles J.	Camrose	1725	April 5, 1911
Scott, John S.	Bashaw	1726	April 5, 1911
Scott, John S.	Bashaw	2899	April 16, 1915
Seward, Gale	Strome	1727	April 5, 1911
Shields, David W.	Carlstadt	1747	April 10, 1911
Schroeder, Alex.	Beaver Hills	1773	April 21, 1911
Smith, Thomas M.	Edmonton	1774	April 21, 1911
Smith, J. Edgar	Noble	1792	April 24, 1911
Schrieber, John	Taber	1793	April 24, 1911
Stephens, Samuel	Carmangay	1799	April 26, 1911
Stewart, Joseph	Irricana	1808	May 6, 1911
Soetje, Henry	Chinook	1824	May 20, 1911
Smith, Albert A.	Magrath	1839	May 26, 1911
Spangrud, Emil	Pincher Creek	1840	May 26, 1911
Stackhouse, Wm. C.	Edmonton	1869	June 26, 1911
Sebern, Horace E.	Edmonton	1872	July 12, 1911
Smeaton, Andrew	Calgary	1903	Aug. 22, 1911
Sorenson, Charles	Lethbridge	1918	Aug. 24, 1911
St. Peter, J. F.	Diamond City	2361	Aug. 14, 1912
Stevens, George N.	Calgary	1939	Sept. 8, 1911
Skelton, Fred A.	Wheat Centre	1950	Sept. 9, 1911
Slevinski, Alex.	Mundare	1953	Sept. 9, 1911
Spallin, Joseph	Fort Saskatchewan	1957	Sept. 9, 1911
Selwood, Wm. H.	Clover Bar	1966	Oct. 18, 1911
Shields, James R.	Edmonton	1987	Nov. 10, 1911
Smith, Samuel George	Huxley	2003	Nov. 25, 1911
Smith, John	Edmonton	2022	Dec. 31, 1911
Sommers, Delbert	Lawrence	1241	Mar. 15, 1910
Sommers, Delbert	Lawrence	2153	April 16, 1912
Shidler, Elmer H.	Cardston	1319	April 7, 1910
Shidler, Elmer H.	Cardston	2033	Feb. 14, 1912
Schrieber, Wm.	Eyremore	1709	Mar. 31, 1911
Schrieber, Wm.	Eyremore	2159	April 19, 1912
Stoner, Orville W.	Strathcona	1922	Aug. 25, 1912
Stoner, Orville W.	Strathcona	2106	Mar. 25, 1912
Scott, Wilbert W.	Summerview	2064	Mar. 18, 1912
Scott, Frank	Gleichen	2132	April 4, 1912
Sears, Thomas	Dalroy	2123	April 4, 1912
Spoucler, W. J.	Reid Hill	2154	April 16, 1912
Sand, Elmer M.	Edburg	2171	April 20, 1912
Strong, Ross D.	Burdett	2185	April 23, 1912

Schedule of Holders of Final Certificates of Qualification under
The Boilers Act.—*Continued.*

NAME	ADDRESS	NO. OF CERT.	DATE OF ISSUE.
<i>Third Class.—Continued.</i>			
Scully, Daniel	Seven Persons	2186	April 23, 1912
Sillib, Walter	Whitla	2187	April 23, 1912
Sinclair, E. R.	Medicine Hat	2189	April 23, 1912
Stuart, James E.	Edmonton	2227	April 29, 1912
Stuart, James E.	Edmonton	2390	Sept. 27, 1912
Smart, Charles C.	Crossfield	2240	May 1, 1912
Strang, Andrew R.	Carbon	2241	May 1, 1912
Stuart, Wm. G.	Coaldale	2245	May 2, 1912
Stewart, Andrew	Calgary	2282	May 22, 1912
Skark, Jans.	Calgary	2283	May 22, 1912
Smith, John Wesley	Calgary	2303	June 11, 1912
Sherwood, Ralph O.	St. Albert	2319	June 17, 1912
Shafer, Melvan J.	Edmonton	2335	July 16, 1912
Spencer, James	Calgary	2373	Sept. 19, 1912
Silver, William	St. Albert	2380	Sept. 20, 1912
Stingle, Albert W.	Edmonton	2558	May 3, 1913
Stone, William	Edmonton	2395	Oct. 7, 1912
Scanlin, Edward	Bassano	2403	Oct. 19, 1912
Smiley, Levy	Calgary	1852	June 13, 1912
Smiley, Levy	Calgary	2537	April 21, 1913
Stevenson, Ivy W.	Calgary	2538	April 21, 1913
Schultz, John	Lethbridge	2455	Jan. 15, 1913
Sanders, Thomas O.	Bassano	2468	Feb. 13, 1913
Schultz, Emil	Bruderheim	2496	Mar. 26, 1913
Scobie, John H.	Lethbridge	2545	April 23, 1913
Singleton, Thomas F.	Edmonton	2556	May 3, 1913
Stepina, Joseph	Edmonton	2564	May 14, 1913
Steele, Charles Wm.	Calgary	2574	May 19, 1913
Stephens, John	Calgary	2585	June 18, 1913
Sterne, Alf.	Calgary	2586	June 18, 1913
Small, Lorne	Maleb	2591	June 19, 1913
Stevens, Fred V.	Edmonton	2600	June 18, 1913
Sweet, William A.	Calgary	2631	Sept. 20, 1913
Stewart, Albert A.	Flowerdale	2636	Oct. 13, 1913
Scott, William R.	Edmonton	2646	Nov. 11, 1913
Steele, Thomas	Coalhurst	2659	Dec. 16, 1913
Shea, Pat J.	Edmonton	2666	Dec. 17, 1913
Strand, Frank E.	Edmonton	2690	Feb. 16, 1914
Sargent, George	Calgary	2734	April 21, 1914
Stuckey, Samuel	Edmonton	2789	June 22, 1914
Stinis, Dirk P.	Spirit River	2803	Aug. 5, 1914
Stafford, Charles G.	Lethbridge	2831	Oct. 17, 1914
Sawezuk, Gregor	Mundare	2667	Dec. 17, 1913
Shelton, Henry	Edmonton	2678	Jan. 12, 1914
Shultz, John D.	Calgary	3040	Aug. 18, 1916
Shackleton, Sam	Calgary	2881	Mar. 26, 1915
Shepherd, Percy Wm.	Fort Saskatchewan ..	2904	April 20, 1915
Stockwell, Homer K.	Condor	2965	Dec. 11, 1915
Strom, Ivan	Drumheller	2975	Jan. 8, 1916
Scott, Wm.	Lethbridge	2980	Jan. 13, 1916
Shipley, William	Calgary	3015	April 27, 1916
Spreight, James A.	Red Deer	3032	July 15, 1916
Schweiger, Herman E.	Ponoka	3035	Aug. 15, 1916
Simpson, James	Edmonton	3085	Dec. 9, 1916
Trible, H. W.	Red Deer	2820	Aug. 29, 1914
Townsend, R. C.	Canmote	*314	Oct. 20, 1902
Turner, Leonard J.	Gleichen	469	Nov. 6, 1903

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Schedule of Holders of Final Certificates of Qualification under
The Boilers Act.—*Continued.*

NAME	ADDRESS	NO. OF CERT.	DATE OF ISSUE.
Third Class.— <i>Continued.</i>			
Terry, Peter	Okotoks	*470	Nov. 6, 1903
Turnbull, Robert	Strathcona	*519	April 8, 1904
Trussler, A. E.	Highland Park	*612	Sept. 27, 1904
Tennison, John C.	Leduc	*722	Mar. 3, 1905
Tribel, Clarence A.	Red Deer	*782	Mar. 24, 1905
Tillapaugh, John	Warwick	48	Sept. 23, 1905
Tanner, Wm. Jos.	Raymond	15	Sept. 16, 1905
Thomas, A. I.	Frank	890	Mar. 24, 1909
Treasure, Sam	Claresholm	58	Dec. 19, 1905
Trembly, Miles I.	Edmonton	73	Mar. 26, 1906
Taylor, David A.	Red Deer	162	July 7, 1906
Tufts, Josiah	Taber	187	Aug. 13, 1906
Turner, Ernest H.	Warwick	214	Sept. 13, 1906
Towers, Fred J.	Red Deer	299	May 20, 1907
Traub, Wm.	Didsbury	325	May 29, 1907
Telford, Ernest E.	Vermillion	330	May 31, 1907
Tennant, Wm. J.	Calgary	350	June 4, 1907
Thompson, George A.	Red Willow	374	June 7, 1907
Tiede, August	Stettler	375	June 7, 1907
Trussler, A. D.	Strathcona	416	June 14, 1907
Thrum, Charles W.	High River	433	June 19, 1907
Turner, George H.	Taber	445	July 15, 1907
Tucker, Glines	Stavely	1843	May 29, 1911
Tollestrup, Christian F.	Raymond	472	July 15, 1907
Thwaytes, Lancelot	Edmonton	497	Oct. 15, 1907
Tewsley, James S.	Carstairs	525	Oct. 24, 1907
Thompson, Thos. G.	Edmonton	589	April 2, 1908
Turnbull, W. N.	Penhold	634	April 14, 1908
Taylor, Orrin O.	Harmattan	647	April 14, 1908
Tidball, Wm. E.	Carstairs	651	April 15, 1908
Taylor, Wm. L.	Killam	2612	Aug. 2, 1913
Thronsdon, Teo.	Camrose	714	May 18, 1908
Teardiff, Joseph E.	Fort Vermilion	743	Aug. 6, 1908
Toews, Cornelius F.	Stern	765	Sept. 11, 1908
Tronnes, Peter	Dorelee	808	Sept. 25, 1908
Todd, Walker	Macleod	1270	Mar. 28, 1910
Taylor, Wm. J.	Lochinvar	976	April 17, 1909
Trono, Louis	Canmore	1032	April 28, 1909
Tronto, Emile	Canmore	1033	April 28, 1909
Townsend, Lean E.	Stirling	1085	July 16, 1909
Thomas, William H.	Lloydminster	1167	Sept. 29, 1909
Tillapaugh, John F.	Vegreville	1169	Sept. 29, 1909
Tanner, James	Macleod	1272	Mar. 28, 1910
Taylor, Henry G.	Ponoka	1296	April 1, 1910
Toward, James B.	Bankhead	2575	May 19, 1913
Thomas, Emery R.	Carlstadt	1398	April 25, 1910
Tessier, George A.	Ena	1431	June 14, 1910
Toppin, Samuel S.	Calgary	1469	Aug. 15, 1910
Tupper, Roy O.	Kipp	1483	Sept. 1, 1910
Turner, Philip R.	Fort Saskatchewan	1518	Sept. 21, 1910
Thomas, Wm.	Bassano	2004	Nov. 29, 1911
Todd, Robert	Strathcona	2117	April 1, 1912
Tharp, Clancey L.	Taber	1572	Oct. 20, 1910
Tomfohr, George	Milk River	1587	Nov. 17, 1910
Thompson, Henry	Castor	1677	Mar. 24, 1911
Tennis, Lloyd	Homeglen	1678	Mar. 24, 1911
Taylor, John W.	Lethbridge	1692	Mar. 29, 1911
Thoreson, Thomas L.	Holden	1700	Mar. 31, 1911

*Indicates Certificate was granted by North-West Territories.

Schedule of Holders of Final Certificates of Qualification under
The Boilers Act.—*Continued.*

NAME	ADDRESS	NO. OF CERT.	DATE OF ISSUE.
<i>Third Class.—Continued.</i>			
Tingley, Alex. B.	Blackfoot	1701	Mar. 31, 1911
Turnell, Reese W.	Three Hills	1728	April 5, 1911
Towler, John W.	Sedgewick	1729	April 5, 1911
Taylor, Frank S.	Carlstadt	1748	April 10, 1911
Thillet, Claud	Calgary	1823	May 20, 1911
Thielen, Joseph	Milk River	1838	May 26, 1911
Toews, Peter L.	Stern	1904	Aug. 22, 1912
Trail, Herbert	Calgary	1996	Nov. 16, 1911
Thompson, Gordon B.	Strathcona	2011	Dec. 11, 1911
Thompson, Charles	Red Deer	297	May 20, 1907
Thompson, James	Innisfail	2034	Feb. 14, 1912
Thompson, Frank L.	Macleod	1271	Mar. 28, 1910
Thompson, Frank L.	Macleod	2085	Mar. 18, 1912
Thompson, Robson	Calgary	2027	Jan. 16, 1912
Thompson, Robson	Calgary	2818	Aug. 22, 1914
Teighton, Roy F.	Wetaskiwin	2050	Feb. 23, 1912
Topper, George	Nanton	2113	Mar. 28, 1912
Taylor, Roy	Dolcy	2146	April 10, 1912
Tubbs, Allie	Taber	2161	April 19, 1912
Thomas, Alfred Ernest	Edmonton	2812	Aug. 17, 1914
Taylor, Stead	Strathcona	2321	June 17, 1912
Thorp, Fred Wm.	Calgary	2415	Nov. 12, 1912
Todd, Fred C.	Edmonton S.	2497	Mar. 26, 1913
Towle, Ray M.	Redeliff	2523	April 15, 1913
Tully, James A.	Calgary	2539	April 21, 1913
Tilly, James A.	Calgary	2540	April 21, 1913
Thomson, Alex.	Edmonton	2581	May 20, 1913
Tully, Fred A.	Medicine Hat	2592	June 19, 1913
Thoman, George A.	Camrose	2728	April 16, 1914
Turner, William T.	Mountain Park	2741	April 27, 1914
Tuininga, Klass	Edmonton	2963	Dec. 10, 1915
Twist, Oliver	P. R. Crossing	2992	Mar. 29, 1916
Tierney, James J.	Calgary	3016	April 27, 1916
Utter, Frank C.	Whitecourt	2051	Feb. 29, 1912
Utas, Peter	Wetaskiwin	*331	Feb. 13, 1903
Umbach, William	Spruce Grove	*357	May 13, 1903
Umbach, John H.	Spruce Grove	67	Mar. 16, 1906
Urback, Alfred F.	Calgary	258	Jan. 22, 1907
Umbach, Edgar A.	Spruce Grove	656	April 22, 1908
Underwood, Harry A.	Emsbury	689	May 1, 1908
Ullman, Albert	Granum	842	Oct. 2, 1908
Ursin, Bjorne	Kananaskis	2615	Aug. 11, 1913
Unger, Joseph	Edmonton	2691	Feb. 16, 1914
Vogel, Wilhelm	Strathcona	*22	Oct. 9, 1899
VanMeter, Chas. E.	Millet	*212	Dec. 18, 1901
Vanacker, Louis	St. Albert	*373	May 13, 1903
Vig, Oscar O.	Bentley	763	Mar. 24, 1905
Veeder, Robert B.	Wetaskiwin	*791	Mar. 27, 1905
VanSellick, Jacob	Edmonton	32	Sept. 16, 1905
VanWegan, Louis	Raymond	42	Sept. 18, 1905
Vogel, Ferdinand	Strathcona	2293	May 29, 1912
Vig, Casper O.	Bentley	110	April 25, 1906
Vaughn, Frank	Calgary	336	June 14, 1907
VanWinkle, Howard	High River	2855	Dec. 17, 1914
VanWinkle, Chester A.	High River	439	June 19, 1907
Venables, Wm.	Medicine Hat	482	Aug. 1, 1907

*Indicates Certificate was granted by North-West Territories.

Schedule of Holders of Final Certificates of Qualification under
The Boilers Act.—Continued.

NAME	ADDRESS	NO. OF CERT.	DATE OF ISSUE.
Third Class.—Continued.			
Veith, F. Wm.	Inga	490	Oct. 15, 1907
Vessey, Moses	Sylvan Lake	1194	Feb. 21, 1910
Vlasak, Rudolph	Wessington	539	Oct. 28, 1907
Vandburgh, James N.	Calgary	587	Mar. 23, 1907
Vanyle, Charles	Edmonton	597	April 2, 1908
Vanderford, Sylvester A.	Stettler	1297	April 1, 1910
Vint, Francis	Stettler	1298	April 1, 1910
Varembo, Olaf H.	Camrose	1546	Oct. 7, 1910
VanMeter, Jacob A.	Millet	823	Sept. 29, 1908
Valentine, Marcon F.	Bellevue	924	Mar. 30, 1909
Vaughn, Clifford E.	Wetaskiwin	1097	Sept. 7, 1909
VanKluck, Alerie	Reid Hill	1136	Sept. 21, 1909
Von Wald, Ernest C.	Stavely	1952	Sept. 9, 1911
Varty, Herbert H.	La Pearl	2147	April 10, 1912
Van Deer Doorn, Ant. E.	Medicine Hat	2190	April 23, 1912
Van Der Velde, M.	Langdon	2214	April 26, 1912
Vogel, Andrew J.	Edmonton	2449	Jan. 13, 1913
Van Nest, Andrew C.	Medicine Hat	2603	July 10, 1913
Vanderpool, Joseph W.	Calgary	2043	Feb. 14, 1912
Van Maarlion, John	Lethbridge	3057	Oct. 20, 1916
Vint, Francis	Drumheller	3082	Dec. 8, 1916
Witmer, Abram	Strathcona	*29	Oct. 9, 1899
Wilson, James	Calgary	65	July 19, 1900
Wulff, Nick	Edmonton	1084	July 13, 1909
Walker, Robert	Edmonton	*251	Aug. 13, 1902
Weder, Frank	Beaver Hills	*462	Oct. 28, 1903
Wells, Charles	Rosenroll	*517	April 18, 1904
Wardrop, John L.	East Clover Bar	*640	Oct. 15, 1904
Will, Louis	Bankhead	*682	Jan. 31, 1905
Wilkinson, Richard	Olds	*754	Mar. 24, 1905
Whitcotton, Robert M.	Lacombe	164	July 14, 1906
Wilson, Wm. Jos.	Coleman	9	Sept. 16, 1905
Wallace, W. J.	Macleod	12	Sept. 16, 1905
Wood, Wm. F.	Tofield	44	Sept. 18, 1905
Whalen, James	Edmonton	69	Mar. 1, 1906
Wetterberg, Theo.	Canmore	100	April 20, 1906
Watts, Sam	Lacombe	103	April 24, 1906
Werner, Wm. Fred	Red Deer	108	April 24, 1906
Waymark, Richard T.	Calgary	123	April 30, 1906
Whitaker, Wm.	Edmonton	129	May 4, 1906
Wisler, Oliver P.	Stettler	136	May 10, 1906
Webber, Alfred	Medicine Hat	2191	April 23, 1912
Wright, Bruce M.	Calgary	205	July 30, 1906
Watters, Wm. E.	Strathcona	227	Sept. 20, 1906
Wynn, Robert	Kneehill Valley	291	May 20, 1907
Wood, Rex. R.	Carstairs	309	May 29, 1907
Wacker, Grover	Rawdonville	322	May 29, 1907
Webster, Robert J.	Marwayne	390	June 14, 1907
Walkermeyer, Wm.	Heatherbrae	396	June 14, 1907
Wilcox, Isaac A.	High River	423	June 19, 1907
Wilson, Archibald	Brant	1465	Aug. 29, 1910
Wilderman, Raymond A.	High River	437	June 19, 1907
Walters, Wm.	Claresholm	864	Oct. 24, 1907
Wilcocks, Wm.	Lethbridge	475	July 15, 1908
Watson, Walter J.	Claresholm	578	Mar. 23, 1908
White, Jack	Calgary	585	Mar. 23, 1908
Wright, Meritt B.	Edmonton	593	April 2, 1908

*Indicates Certificate was granted by North-West Territories.

Schedule of Holders of Final Certificates of Qualification under
The Boilers Act.—*Continued.*

NAME	ADDRESS	NO. OF CERT.	DATE OF ISSUE.
<i>Third Class.—Continued.</i>			
White, George T.	Red Deer	639	April 14, 1908
Williams, Frank T.	Crossfield	682	May 1, 1908
Winkleman, Jules	Leduc	711	May 18, 1908
Wilbert, Charles	Wetaskiwin	721	May 28, 1908
Walker, Preston	Lacombe	772	Sept. 14, 1908
Watson, P.	Edmonton	781	Sept. 18, 1908
Wentworth, Wm.	Okotoks	806	Sept. 22, 1908
Wilson, Bert M.	Nanton	843	Oct. 2, 1908
Wright, Leroy H.	Cardston	859	Oct. 6, 1908
Wilson, Charles O.	Spring Coulee	863	Oct. 21, 1908
Wallwork, James	Taber	903	Mar. 24, 1909
Webster, Alex.	Pincher Creek	933	April 1, 1909
Weber, Noah R.	Carstairs	950	April 6, 1909
Watts, George	Macleod	957	April 9, 1909
Wilson, Andrew W.	Vegreville	985	April 20, 1909
Walker, Edgar N.	Mundare	986	April 20, 1909
Wilson, Jos. W.	Edmonton	987	April 20, 1909
Wyman, Clark I.	Magrath	1007	April 25, 1909
Walker, Charles H.	Warner	1008	April 25, 1909
Williams, Edgar H.	Bankhead	1034	April 28, 1909
Woodcock, Frank F.	Medicine Hat	2827	Sept. 29, 1914
Wiltzen, Martin	Chipman	1043	April 29, 1909
White, Edward	Lethbridge	1056	May 3, 1909
Weisser, Christian B.	Camrose	1094	Sept. 7, 1909
West, Wm. A.	Mewassin	1099	Sept. 13, 1909
White, Thos. J.	Stirling	1108	Sept. 15, 1909
Wick, Anton	Lineham	1137	Sept. 21, 1909
Wilson, Aura L.	Carstairs	1138	Sept. 21, 1909
Wood, Roy J.	Carstairs	1139	Sept. 21, 1909
Wolanskey, John	Edmonton	1149	Sept. 25, 1909
Wonnop, Jos. L.	Lawrence	1156	Sept. 28, 1909
Watt, George	Strathcona	1184	Dec. 4, 1909
White, Chris., Jr.	Red Deer	1201	Mar. 3, 1910
Williams, Albert	Magrath	1245	Mar. 15, 1910
Wilson, Clifford	Camrose	1299	April 1, 1910
Watson, Robert	Edgerton	1352	April 13, 1910
Wilson, Rufus B.	Tofield	1354	April 13, 1910
Wilson, Rufus B.	Tofield	1353	April 13, 1910
Woods, Henry	Warner	1365	April 14, 1910
Wilson, Robert	Medicine Hat	1399	April 25, 1910
Whitehead, Martin	Banff	1432	June 14, 1910
Woods, Harry	Lethbridge	1439	July 8, 1910
White, John W.	Brooks	1452	July 15, 1910
Walker, John A.	Warren	1490	Sept. 7, 1910
Wagner, A. C. L.	Calgary	1529	Sept. 23, 1910
Wilson, John L.	Bassano	1530	Sept. 23, 1910
Wilson, Wm. John	Angus Ridge	1547	Oct. 7, 1910
Wocknitz, Paul	Magrath	1573	Oct. 20, 1910
Wessenger, Ray	Medicine Hat	1574	Oct. 20, 1910
Wessenger, Ray	Medicine Hat	1749	April 12, 1911
Wolfe, John W.	Edmonton	1588	Nov. 21, 1910
Williams, Chas. A.	Calgary	1595	Dec. 15, 1910
Williams, Alfred L.	Calgary	1596	Dec. 15, 1910
Watson, Wilfrid G.	Calgary	1663	Mar. 20, 1911
Wallace, Richard R.	Lloydminster	1669	Mar. 22, 1911
White, Wm. R.	Castor	2089	Mar. 21, 1912
Wight, H. E.	Cardston	1683	Mar. 28, 1911
Wight, H. E.	Cardston	2504	Mar. 31, 1913
Wright, Oscar H.	Warner	1693	Mar. 29, 1911
Wagar, Elmore C.	Bow Island	1710	Mar. 31, 1911

Schedule of Holders of Final Certificates of Qualification under
The Boilers Act.—*Continued.*

NAME	ADDRESS	NO. OF CERT.	DATE OF ISSUE.
<i>Third Class.—Continued.</i>			
Wagar, George	Bow Island	1711	Mar. 31, 1911
Wilson, Charles B.	Olds	1730	April 5, 1911
Wood, Thomas W. G.	Lethbridge	2608	July 18, 1913
Weeks, George S.	Seven Persons	1795	April 24, 1911
Woods, George	New Dayton	1842	April 26, 1911
Woodrow, Duncan	Edmonton	1847	June 9, 1911
Wilbraham, George	Edmonton	1873	July 12, 1911
Williams, Thomas	Grande Prairie	1884	July 19, 1911
Wilson, Ernest	Langdon	1885	July 19, 1911
Walker, Jas. H.	Gleichen	1905	Aug. 22, 1911
Wonsor, Louis A.	Calgary	1940	Sept. 8, 1911
Wagar, Arnold	Millet	1958	Sept. 9, 1911
Wilson, Oscar L.	High River	1971	Oct. 20, 1911
Welsh, John	Vermilion	2012	Dec. 12, 1911
Williams, Ross D.	Winnifred	2017	Dec. 19, 1911
Wertz, Ran W.	Lethbridge	2018	Dec. 19, 1911
Whalls, George	Calgary	2020	Dec. 23, 1911
Wharron, Frank T.	Calgary	1213	April 7, 1910
Wharron, Frank T.	Calgary	2162	April 19, 1912
Williams, Wm. D.	Vermilion	1508	Sept. 21, 1910
Williams, Wm. D.	Vermilion	2232	April 29, 1912
Wallace, F. M.	Lethbridge	1878	July 13, 1911
Wallace, F. M.	Lethbridge	2067	Mar. 13, 1912
Wilson, Stephen E.	Calgary	2044	Feb. 14, 1912
Wark, Fred D.	Gladys	2114	Mar. 28, 1912
Willits, John T.	Clover Bar	2219	April 29, 1912
Weber, Edwin	Didsbury	2261	May 3, 1912
Wesenberg, William	Ghost Pine Creek ...	2262	May 3, 1912
Wheatley, Edward A.	Leslieville	2265	May 15, 1912
Williams, John	Lille	2269	May 18, 1912
Watson, Isaac M.	Lethbridge	2270	May 18, 1912
Winters, Arthur J.	Bassano	2284	May 22, 1912
Wimer, William	Ferintosh	2295	May 29, 1912
Wilcox, Edward	Camrose	2508	April 4, 1913
Wilson, Aaron	Calgary	2304	June 11, 1912
Walker, Alex.	Calgary	2322	June 21, 1912
White, William L.	Edmonton	2336	July 16, 1912
Ward, William	Calgary	2349	July 18, 1912
Walker, John F.	Bassano	2583	May 21, 1913
Wright, Frank G.	Staffordville	2356	July 19, 1912
Ward, Walter George	Lethbridge	2814	Aug. 18, 1914
Wisner, Henry F.	Nanton	2402	Oct. 19, 1912
Wyatt, Sidney	Calgary	2407	Oct. 19, 1912
Wright, Joseph	Calgary	2408	Oct. 19, 1912
Wooley, Norman	Medicine Hat	1400	Dec. 25, 1910
Wooley, Norman	Medicine Hat	2524	April 15, 1913
Wilson, William	Hardieville	2456	Jan. 15, 1913
Williams, Fred Jas.	Medicine Hat	2457	Jan. 15, 1913
Wells, Edwin N.	Bassano	2481	Mar. 14, 1913
Wallis, Harold W.	Calgary	2541	April 21, 1913
Williams, Thomas	Lethbridge	2569	May 15, 1913
Wilson, Robert B.	Edmonton	2621	Aug. 21, 1913
Wilson, Alex.	Edmonton	2648	Nov. 11, 1913
Whitfield, Arthur	Lethbridge	2660	Dec. 16, 1913
Walker, Earl A.	Calgary	2670	Dec. 17, 1913
Williams, Richard	Edmonton	2769	June 11, 1914
Weir, William J.	Medicine Hat	2773	June 17, 1914
Wieting, Henry	Buford	2794	July 16, 1914
Weatherhead, Orrel S.	Edmonton	2813	Aug. 17, 1914
Whyte, Wm. R.	Calgary	2453	Jan. 15, 1913

Schedule of Holders of Final Certificates of Qualification under
The Boilers Act.—*Continued.*

NAME	ADDRESS	NO. OF CERT.	DATE OF ISSUE.
Third Class.—Continued.			
Whyte, Wm. R.	Calgary	2972	Dec. 16, 1915
Waldenberg, Wm.	Mitford	2862	Jan. 11, 1915
Waklem, Thomas	Coleman	2875	Mar. 23, 1915
Wiebe, John	Vermilion	2895	April 10, 1915
Wellington, Wm. John	Edmonton	2924	June 15, 1915
Williams, David	Calgary	3041	Aug. 18, 1916
White, Jos. Albert	Lethbridge	1366	April 14, 1910
White, Jos. Albert	Lethbridge	3033	July 21, 1916
Watkins, Edward H.	Viking	3002	April 12, 1916
Waterfield, James A.	Calgary	3021	May 18, 1916
Widney, Roy J.	Black Diamond	3030	June 13, 1916
Young, Arthur	Banff	*491	Mar. 14, 1904
Young, D. M.	Lethbridge	4	Sept. 16, 1905
Yeamans, Charles A.	Edmonton	2294	May 29, 1912
Young, John T.	Stavely	465	July 15, 1907
Young, Alva L.	Markerville	643	April 14, 1908
Young, David	Strathcona	2623	Aug. 25, 1913
Young, Peter	Calgary	959	April 9, 1909
Young, James	Edmonton	1355	April 13, 1910
Young, James	Gleichen	1531	Sept. 23, 1910
Yeomans, George M.	Brockett	1634	Mar. 15, 1911
Yeomans, George M.	Brockett	2628	Sept. 18, 1913
Zimmerman, Arthur C.	Bawlf	1548	Oct. 7, 1910
Zuehlke, F. C.	Urquhart	*188	Dec. 18, 1901
Zimmerman, Otto	Red Lodge	*756	Mar. 24, 1905
Zaczhowski, John	Edison	1150	Sept. 25, 1909
Zille, Frank	Lille	2629	Sept. 18, 1913
Zorves, Andrew J.	Blairmore	2088	Mar. 18, 1912
Zavity, Bryant	Edmonton	2464	Feb. 12, 1913

TRACTION ENGINEERS' Final Certificates.

NAME	ADDRESS	NO. OF CERT.	DATE OF ISSUE.
Arrison, Norman W.	Gleichen	73	Aug. 16, 1912
Andrews, John	Stewartwyn	1	May 13, 1912
Adler, Lee	Stirling	32	June 14, 1912
Arndt, Paul	Whitla	83	Sept. 17, 1912
Atkinson, Henry	Medicine Hat	84	Sept. 17, 1912
Archambio, Fred	Rosemead	286	June 9, 1913
Alm, Enoch Wm.	Bittern Lake	173	Mar. 28, 1913
Auburg, Bert.	Carlstadt	214	April 7, 1913
Arnew, Thos. A.	Sundre	224	April 11, 1913
Armstrong, John	Stavely	250	April 23, 1913
Abet, John H.	Lloydminster	255	April 26, 1913
Affseth, Christian	Holden	305	June 27, 1913
Allen, Wallace	Killam	375	Sept. 25, 1913
Adshead, Cecil H.	Calgary	396	Nov. 8, 1913
Ayers, Thomas C.	Edmonton	432	April 2, 1914
Algot, Gustaf J.	Angle Lake	478	April 17, 1914

*Indicates Certificate was granted by North-West Territories.

TRACTION ENGINEERS' Final Certificates.—Continued.

NAME	ADDRESS	NO. OF CERT.	DATE OF ISSUE.
Anderson, Conrad G.	Lawton	511	April 29, 1914
Armstrong, Norman B.	Ryley	535	June 22, 1914
Allan, Malcolm M.	Bottrel	567	Sept. 21, 1914
Anderson, Nels	Calmar	595	Oct. 19, 1914
Atkinson, Wm. E.	Claresholm	754	Sept. 10, 1915
Arbuster, John	Stony Plain	709	May 29, 1915
Anderson, Otto Emil	Camrose	656	April 16, 1915
Armstrong, John K.	Fort Saskatchewan ..	696	April 27, 1915
Armstrong, Albert B.	Edmonton	697	April 27, 1915
Anderson, Roy L.	Magrath	723	July 15, 1915
Ausman, Julius L.	Spring Coulee	724	July 15, 1915
Anderson, Elias A.	Yetwood	735	Aug. 20, 1915
Ambler, Edwin	Irma	739	Aug. 24, 1915
Anderson, Wm.	Edmonton	740	Aug. 24, 1915
Allen, George N.	Edmonton	772	Sept. 20, 1915
Adams, James Henry	Sibbald	786	Sept. 28, 1915
Arnold, William Roy	Mannville	855	April 12, 1916
Arthur, Chester A.	Vegreville	856	April 12, 1916
Ariczuk, William	Luzan	901	April 25, 1916
Alton, John M.	Fort Saskatchewan ..	902	April 25, 1916
Adams, Ernest C.	Calgary	961	Aug. 18, 1916
Allen, James Henry	Calgary	1003	Sept. 13, 1916
Arnold, Herbert L.	Calgary	1005	Sept. 13, 1916
Adler, Fewson	Stirling	1035	Sept. 15, 1916
Androso, Maechol	Alsask	1045	Sept. 15, 1916
Anderburg, Chard	Lomond	1047	Sept. 20, 1916
Blanchard, Arthur L.	Olds	56	July 30, 1912
Benning, Alonso	Lethbridge	26	June 5, 1912
Bassett, Charles C.	Cora Lynn	27	June 10, 1912
Burger, Samuel M.	Bentley	28	June 10, 1912
Bobier, Louis	Coaldale	65	Aug. 14, 1912
Brown, Frank	Spring Coulee	85	Sept. 17, 1912
Buchanan, Robert James ..	Welling	86	Sept. 17, 1912
Boyce, Samuel L.	Calgary	107	Sept. 19, 1912
Beebe, Roy A.	Cowley	122	Oct. 17, 1912
Bowman, Harry H.	High River	126	Oct. 19, 1912
Baker, Edwin E.	Glenview	127	Oct. 19, 1912
Blegan, John P.	Crossfield	131	Oct. 19, 1912
Brown, Dewitt E.	Bells Hill	294	June 17, 1913
Boisvert, Alex.	Diligence	140	Jan. 13, 1913
Bennett, William H.	Calgary	141	Jan. 15, 1913
Bjornson, Carl A.	Lethbridge	142	Jan. 15, 1913
Bulford, George J.	High River	156	Mar. 14, 1913
Briggs, Ami C.	Stavely	166	Mar. 19, 1913
Bransen, Joseph H.	Spring Lake	174	Mar. 28, 1913
Bowie, George W.	Ferry Point	175	Mar. 28, 1913
Button, Albert M.	Wiste	813	Oct. 16, 1915
Behrens, David	Erskine	177	Mar. 28, 1913
Bonson, Mick	Castor	205	April 4, 1913
Bond, Lester H.	Bassano	215	April 4, 1913
Boschee, Jacob J.	Thelma	227	April 15, 1913
Burt, Leander B.	Suffield	251	April 23, 1913
Berger, Theo. G.	Purple Springs	279	May 15, 1913
Betz, Wilber L.	Curlew	288	June 16, 1913
Brewer, William C.	Stettler	289	June 16, 1913
Bower, George E.	Calgary	297	June 18, 1913
Bricker, Ralph	Strome	307	July 10, 1913
Brown, Lawrence	Jethson	308	July 15, 1913
Barton, Reginald	Edmonton	330	Aug. 21, 1913
Bjornson, Henry A.	Pendant D'Oreille ...	341	Sept. 14, 1913
Brickman, Julius	Wetaskiwin	342	Sept. 16, 1913
Brown, Earl F.	Crossfield	362	Sept. 20, 1913
Brunelle, Oscar	St. Paul des Metis ...	400	Nov. 11, 1913

TRACTION ENGINEERS' Final Certificates.—Continued.

NAME	ADDRESS	NO. OF CERT.	DATE OF ISSUE.
Burton, Edgar W.	Calgary	402	Jan. 7, 1914
Brown, Thomas	Frank	428	Mar. 24, 1914
Bass, George W.	Grande Prairie	407	Feb. 16, 1914
Bardell, Jesse	Taber	444	April 15, 1914
Bennett, Ira J.	Nobleford	445	April 15, 1914
Burbidge, Louis P.	Hardisty	454	April 16, 1914
Bachand, Alphonse	Legal	500	April 27, 1914
Bibby, Walter J.	Pine Creek	512	April 29, 1914
Bourbonnie, Vern	Lethbridge	545	Aug. 12, 1914
Barkman, Jowl J.	Acme	800	Sept. 28, 1914
Beck, Albert R.	Innisfail	561	Sept. 15, 1914
Boetger, Milton	Mayton	586	Oct. 10, 1914
Bell, Wm. F.	High River	820	Dec. 8, 1915
Burchnall, Frank M.	Bluff Centre	752	Sept. 8, 1915
Blackmer, John Russell	Coutts	663	Mar. 29, 1915
Briggs, Wm. E.	Ribbledale	639	April 8, 1915
Brown, Edward	Richdale	640	April 8, 1915
Bourbonnie, Geo. E.	Gadsby	657	April 16, 1915
Brocke, Torfin	Edmonton	704	May 12, 1915
Blakley, Henry	Irvine	732	Aug. 16, 1915
Black, Herbert L.	Cluny	787	Sept. 28, 1915
Besse, Florian	Langdon	811	Oct. 15, 1915
Barnhart, Clarence E.	Heatherdown	815	Nov. 15, 1915
Bakken, Ne's O.	Iron Springs	1044	Sept. 16, 1916
Brickman, Roger	Phillips	827	Feb. 14, 1916
Brown, Francis E. L.	Sunnydale	846	April 7, 1916
Brown, Clarence H.	Richdale	847	April 7, 1916
Bertrand, Zinon	Morinville	857	April 12, 1916
Bezzulick, John	Mundare	858	April 12, 1916
Budd, Frank	Manyberries	868	April 14, 1916
Baardseth, Carl	Coronation	872	April 17, 1916
Booth, Gerald	Fleet	873	April 17, 1916
Bolduc, William	St. Paul des Metis ..	903	April 25, 1916
Bacon, Chas. G.	Calgary	915	April 27, 1916
Budd, Hiram	Thompson	928	May 18, 1916
Bizek, Gust	Radway Centre	937	July 6, 1916
Bardal, Arne B.	New Hill	942	July 15, 1916
Briggs, Edgar W.	Provost	949	Aug. 15, 1916
Broen, Einar J.	Hay Lake	973	Aug. 24, 1916
Bradbury, Ray C.	Crippsdale	1012	Sept. 14, 1916
Blasius, Mathew J.	Bruderheim	1027	Sept. 14, 1916
Brown, John	Granum	1037	Sept. 15, 1916
Bailey, Benj. H.	Edmonton	1075	Oct. 24, 1916
Black, Harry	Cluny	1082	Nov. 11, 1916
Brooks, Arthur G.	Calgary	1089	Dec. 8, 1916
Cale, Arthur Wm.	Lethbridge	239	Sept. 9, 1913
Choate, Stewart	Trochu	2	May 13, 1912
Curtis, Albert G.	Core Lynn	3	May 13, 1912
Cook, Manny A.	Calgary	17	May 22, 1912
Cathcart, James	Edmonton	38	June 17, 1912
Christensen, Jacob	Standard	48	July 18, 1912
Coutts, Alex.	Warner	53	July 19, 1912
Church, Herbert Geo.	Winnifred	66	Aug. 14, 1912
Coldsnow, Alvah	Coutts	87	Sept. 17, 1912
Clark, Charles	Calgary	287	June 13, 1913
Caskey, Oran A.	Caskey	115	Sept. 27, 1912
Chaffin, John D.	Arrowwood	129	Oct. 19, 1912
Chippenden, Henry L.	Bassano	138	Dec. 18, 1912
Colwell, Samuel W.	Vulcan	157	Mar. 14, 1913
Curtis, Guy H.	Strome	178	Mar. 28, 1913
Cameron, Donald F. B.	Sedgewick	179	Mar. 28, 1913

TRACTION ENGINEERS' Final Certificates.—*Continued.*

NAME	ADDRESS	NO. OF CERT.	DATE OF ISSUE.
Cameron, John A.	Sedgewick	180	Mar. 28, 1913
Culler, Ira M.	Warner	199	Mar. 31, 1913
Curtis, Alfred	McDonaldville	256	April 26, 1913
Craig, Russel H.	Macklin	267	May 3, 1913
Currie, Dugald	Athabasca	273	May 14, 1913
Compton, John A.	Vermilion	301	June 21, 1913
Carson, William	Edmonton	331	Aug. 21, 1913
Carman, Alvin E.	Airdrie	363	Sept. 20, 1913
Carrier, Charles H.	Calgary	364	Sept. 20, 1913
Chubb, Ernest	Kew	365	Sept. 20, 1913
Cromarty, William A.	Pakan	376	Sept. 25, 1913
Courtright, Leo.	Maughan	316	July 30, 1913
Campbell, John C.	Taber	455	April 16, 1914
Corbett, Richard A.	Edmonton S.	587	Oct. 13, 1914
Clark, Albert M.	Warner	438	April 2, 1914
Collett, Daniel R.	Taber	446	April 15, 1914
Carter, David M.	Ohaton	456	April 16, 1914
Charuk, Nicholas	Vegreville	479	April 17, 1914
Connelly, William A.	Cummings	580	April 17, 1914
Clawson, Horatio S.	Bassano	490	April 23, 1914
Cote, Peter	St. Edouard	513	April 29, 1914
Cole, Frank	Peace River Crossing	540	July 25, 1914
Cordel, Marius C.	Halkirk	562	Sept. 15, 1914
Cooper, William H.	High River	606	Nov. 23, 1914
Coultman, Stanton	Orbindale	608	Dec. 11, 1914
Cridland, Walter	Summerview	802	Oct. 2, 1915
Christie, Andrew	Purple Springs	638	April 7, 1915
Cauther, Arthur L.	Medicine Hat	653	April 10, 1915
Clover, Guy H.	Cadogan	658	April 16, 1915
Glennin, Fred	Bawlf	659	April 16, 1915
Compton, Frank H.	Wetaskiwin	660	April 16, 1915
Cory, Melvin	Provost	661	April 16, 1915
Clough, Wm. James	Wetaskiwin	756	Sept. 14, 1915
Cross, Lewis W.	Botha	805	Oct. 12, 1915
Chew, Ernest H.	Hardisty	806	Oct. 13, 1915
Cady, Lynn	Edmonton	1006	Sept. 13, 1916
Crouch, Larry	Redcliff	832	Mar. 13, 1916
Chambers, Spencer	Drumheller	848	April 7, 1916
Cummings, Robert A.	Lonebutte	849	April 7, 1916
Clark, Fred	Minburn	859	April 12, 1916
Connelly, Fred B.	Vermilion	860	April 12, 1916
Clark, William G.	Wilhelmina	874	April 17, 1916
Coots, Sidney	Compeer	875	April 17, 1916
Crone, John S.	Bashaw	876	April 17, 1916
Como, Victor	Therien	904	April 25, 1916
Cleven, Sander	St. Paul des Metis ..	905	April 25, 1916
Conoly, John T.	St. Paul des Metis ..	906	April 25, 1916
Coates, William D.	Howie	928	May 29, 1916
Casley, Hugh	Vulcan	941	July 7, 1916
Crooker, John D.	Lacombe	943	July 15, 1916
Carnes, Oscar	Jenner	952	Aug. 16, 1916
Crosbie, Robt. F.	Calgary	962	Aug. 18, 1916
Chabrier, Edouard	Bulwark	972	Aug. 22, 1916
Chratko, William	Brosseau	1013	Sept. 14, 1916
Clarke, Arthur M.	Pembina	1014	Sept. 14, 1916
Cornell, Gordon	Grassy Lake	1037	Sept. 15, 1916
Cody, Jos. E.	Lethbridge	1048	Sept. 20, 1916
Donnelly, Walter S.	Bow Island	33	June 14, 1912
Dimmer, Matt	Coaldale	67	Aug. 14, 1912

TRACTION ENGINEERS' Final Certificates.—*Continued.*

NAME	ADDRESS	NO. OF CERT.	DATE OF ISSUE.
Dopp, Barnett	Seven Persons	88	Sept. 17, 1912
Danielson, Daniel T.	St. Kilda	89	Sept. 17, 1912
Derby, Bernie E.	Fort Saskatchewan	111	Sept. 20, 1912
Dalquist, August	Calmar	133	Nov. 8, 1912
Dillard, James	Killam	181	Mar. 28, 1913
Delmage, Harry	Taber	203	April 3, 1913
Davis, Henry D.	Three Hills	206	April 4, 1913
Davis, James M.	Ranfurly	234	April 17, 1913
Djuff, Kleng	Dina	257	April 26, 1913
Ducholke, Mike	Stony Plain	258	April 26, 1913
Deas, John W.	Edmonton	284	May 20, 1913
Dobbs, Leo W.	Iowalta	290	June 16, 1913
Day, George F.	Jackville	621	Feb. 26, 1915
Dierks, Charles Theo.	Calgary	366	Sept. 20, 1913
Desler, Herman F.	Stavely	431	Mar. 27, 1914
Davis, Harry	Edmonton	433	April 2, 1914
Drebert, August	New Serepta	617	Feb. 12, 1915
Daniels, Charles M.	Hardisty	757	Sept. 14, 1915
Darker, Resto M.	Lougheed	773	Sept. 20, 1915
Dawson, George A.	Sibbald	788	Sept. 28, 1915
Douglas, Wm. J.	Fenhold	816	Nov. 17, 1915
Dittborner, Ed. R.	Fonoka	825	Feb. 14, 1916
Dickason, Lowell T.	Monitor	877	April 17, 1916
Dobko, John	Vegreville	907	April 25, 1916
Dubois, Jeffery	St. Paul des Metis	908	April 25, 1916
Dare, Edward	Taber	931	June 10, 1916
Deschamps, Frederic	Picardville	973	Aug. 24, 1916
Dove, Yoachin F.	Fraserton	1004	Sept. 13, 1916
Dooley, Cecil H.	Suffield	1032	Sept. 14, 1916
Drew, John F.	Ardenode	1068	Oct. 17, 1916
Davis, Arlic O.	Taber	1072	Oct. 18, 1916
Dick, William R.	Calgary	1083	Nov. 11, 1916
Donnelly, Norman L.	Dalemead	1084	Nov. 11, 1916
Eggenberger, Emil W.	Coalbanks	4	May 13, 1912
Engle, Ralph N.	Bassaro	31	June 11, 1912
Elliott, Walter E.	Calgary	130	Oct. 19, 1912
Estwick, Emanuel	Carlstadt	216	April 7, 1913
Enzenauer, Arthur	Loma	217	April 7, 1913
Ensign, A. L.	Whitla	327	Aug. 12, 1913
Earl, William R.	Norton	427	Mar. 16, 1914
Edwards, Richard	Carmanagay	447	April 15, 1914
English, Wm. S. O.	Spirit River	541	Aug. 5, 1914
Estell, Earl E.	Mirror	563	Aug. 15, 1914
Ellefson, Andrew	Balham	596	Oct. 19, 1914
Erickson, Abraham	Erskine	622	Mar. 12, 1915
Evans, Owen	Puffer	662	April 16, 1915
Eyben, Henry A.	Cummings	687	April 20, 1915
Eggenberger, Lionel G.	Ardley	710	June 10, 1915
Eld, Edward Bert	Parkland	736	Aug. 20, 1915
Emme, Wm. O.	Cayley	789	Sept. 28, 1915
Engleking, Aug. J.	Lethbridge	814	Nov. 13, 1915
Engel, Juzef	Mundare	861	April 12, 1916
Engel, Alec	Cadogan	870	April 17, 1916
Errickson, Geo. G.	Sedgewick	879	April 17, 1916
Eadie, Clarence D.	Lacombe	992	Sept. 11, 1916
Elliott, Arthur H.	Edmonton	1029	Sept. 14, 1916
Evashan, Jacob	Lundbreck	1039	Sept. 15, 1916
Eggenberger, Wm. H.	Lethbridge	1059	Oct. 16, 1916
Ebeling, Fred W.	Aspen Beach	1086	Nov. 14, 1916

TRACTION ENGINEERS' Final Certificates. *Continued.*

NAME	ADDRESS	NO. OF CERT.	DATE OF ISSUE.
Fyrk, Gust	Pendant d'Oreille	12	May 18, 1912
Firth, Wilfrid	Lethbridge	123	Oct. 17, 1912
Frederickson, D. O.	Calgary	134	Nov. 8, 1912
Forbes, Percy H.	Lacombe	143	Jan. 24, 1913
Fry, John	Edmonton	312	July 17, 1913
Farries, Cameron	Grassy Lake	326	Aug. 12, 1913
Forbes, Henry	Lacombe	343	Sept. 16, 1913
Finlay, L. Jackson	Calgary	367	Sept. 20, 1913
Forey, John J.	Big Valley	525	June 12, 1914
Foster, Alfred J.	Consort	411	Mar. 12, 1914
Foster, Norman M.	Consort	412	Mar. 12, 1914
Fogarty, Francis D.	Whitla	448	April 15, 1914
Fitzgerald, William	St. Paul des Metis	514	April 29, 1914
Freadrich, Albert H.	Strome	542	Aug. 11, 1914
Furnish, Jesse E.	Langdon	556	Aug. 22, 1914
Ferguson, Robert	Tudor	568	Sept. 21, 1914
Faith, William A.	Vegreville	572	Sept. 30, 1914
Fuhrhop, Otto	Edmonton South	588	Oct. 15, 1914
Ferguson, Fred. G.	Spruce Grove	589	Oct. 15, 1914
Fead, Norman W.	Innisfail	663	April 15, 1915
Fossum, John E.	Consort	664	April 15, 1915
Furnald, Vern F.	Stavely	725	July 15, 1915
Freiman, Gustav	Wetaskiwin	763	Sept. 14, 1915
Felch, David F.	Huxley	934	June 13, 1916
Felch, William	Huxley	935	June 13, 1916
Flack, Winfred E.	Compere	993	Sept. 11, 1916
Freiman, Herman	Wetaskiwin	994	Sept. 11, 1916
Ferguson, William A.	Innisfree	1046	Sept. 18, 1916
Ferguson, William C.	Tees	1065	Oct. 17, 1916
Green, John Henry	Staunton	68	Aug. 14, 1912
Gray, Joseph O.	Grassy Lake	13	May 18, 1912
Grubert, Henry	Leduc	57	Aug. 12, 1912
Gow, Archibald	Athabasca Landing	40	June 28, 1912
Gilchrist, Lee	Hill Springs	90	Sept. 17, 1912
Graham, Fred O.	Claresholm	91	Sept. 17, 1912
Gibson, Raymond	Warner	152	Mar. 10, 1913
Gale, Edwin	Stettler	182	Mar. 28, 1912
Gibson, E. E.	Warner	200	Mar. 31, 1913
Gibeault, J. Eugene	Morinville	443	April 14, 1914
Gray, Wm. Bain	Okotoks	409	Feb. 19, 1914
Graham, James F.	Brockett	420	Mar. 14, 1914
Gilbertson, Charley	Oyen	457	April 16, 1914
Goodwill, Seth	Cereal	458	April 16, 1914
Gray, Harry L.	Whitla	491	April 23, 1914
Gerrie, William	Orville	536	June 22, 1914
Geistlinger, Charles	Golden Spike	429	July 16, 1914
Gesha, Rhiengold	Bawlf	549	Aug. 14, 1914
Gooble, Louis H.	Spruce Grove	550	Aug. 17, 1914
Grandahl, Albert	Kingman	551	Aug. 17, 1914
Gooble, Matthias	Spruce Grove	609	Dec. 11, 1914
Gotenborg, Otto T.	Coutts	252	April 21, 1913
Getts, Gardo F.	Carmangay	253	April 23, 1913
Green, George H.	Alsask	285	May 21, 1913
Gale, Joseph A.	Stettler	291	June 16, 1913
Garrison, Clinton	Edmonton	325	Aug. 12, 1913
George, Fred. R.	Cadogan	332	Aug. 21, 1913
Gitzel, Gustave	Stony Plain	333	Aug. 21, 1913
Groft, John W.	Strathmore	368	Sept. 20, 1913
Gauthier, Artem	Edmonton South	548	Aug. 12, 1914

TRACTION ENGINEERS' Final Certificates.—*Continued.*

NAME	ADDRESS	NO. OF CERT.	DATE OF ISSUE.
Hesse, Henry	Spruce Grove	392	Oct. 22, 1913
Gaugner, Arthur O.	Lethbridge	785	Sept. 27, 1915
Green, Charles	Bellis	626	Mar. 19, 1915
Glen, Frank	Calgary	681	Mar. 26, 1915
Gordon, George E.	Scottfield	641	April 8, 1915
Gorrell, Charles W.	Castor	665	April 16, 1915
Geehan, Edgar	Calgary	693	April 23, 1915
Goebel, Ludwig	Spruce Grove	705	May 12, 1915
Good, James	Edmonton	718	July 13, 1915
Gallion, Benj. F.	Gadsby	758	Sept. 14, 1915
Grigat, Wm.	Leduc	774	Sept. 20, 1915
Grieve, Hugh T.	Vulcan	812	Oct. 15, 1915
Green, Wm. H.	Raymond	822	Dec. 16, 1915
Green, David W.	Ensleigh	851	April 7, 1916
Garneau, John M.	St. Paul des Metis	909	April 25, 1916
Griffiths, Chas. M.	Cheadle	916	April 27, 1916
Gault, John P.	Edmonton	938	July 6, 1916
George, Leopold J.	Killam	950	Aug. 15, 1916
Grainger, Norman W.	Lethbridge	955	Aug. 17, 1916
Golliaff, Peter	Lethbridge	956	Aug. 17, 1916
Graham, John	Calgary	963	Aug. 18, 1916
Glenn, Thos. J.	Tofield	975	Aug. 24, 1916
Goggin, Percival C.	Morinville	1015	Sept. 14, 1916
Gordy, Nick	Luzan	1016	Sept. 14, 1916
Grothe, Ole A.	Champion	1040	Sept. 15, 1916
Grasham, Leo. George	Retlaw	1060	Oct. 16, 1916
Guard, James T.	Elnore	1066	Oct. 17, 1916
Griffith, Richard J.	Chipman	1076	Oct. 24, 1916
Harwood, Gordon W.	Stettler	5	May 13, 1912
Hesse, William	Calgary	18	May 22, 1912
Hewer, Eber J.	Hairy Hill	58	Aug. 12, 1912
Haley, Edward George	Wheat Centre	74	Aug. 20, 1912
Hantsman, Lewis J.	Carmangay	92	Sept. 17, 1912
Hall, Wm. J.	Calgary	105	Sept. 19, 1912
Harmel, Edward	Edmonton	116	Sept. 27, 1912
Henderson, Harry	Okotoks	128	Oct. 19, 1912
Harris, William Ira	Raymond	167	Mar. 19, 1913
Hagen, Lars E.	Donalda	183	Mar. 28, 1913
Hill, Wellington	Macklin	184	Mar. 28, 1913
Hills, W. Ellsworth	Camrose	185	Mar. 28, 1913
Hodgson, Thomas	Faber	204	April 3, 1913
Hibbert, William J.	Medicine Hat	229	April 15, 1913
Hill, Leslie	Calgary	238	April 21, 1913
Howard, Lindsay L.	Calgary	244	April 21, 1913
Holden, Frank	Lethbridge	254	April 21, 1913
Hellekson, Henry J.	Edson	259	April 26, 1913
Houle, William	Edson	274	May 14, 1913
Hyatt, James E.	Halkirk	292	June 16, 1913
Harrison, Oscar W.	Noble	321	Aug. 11, 1913
Hilstad, Carl	Bentley	344	Sept. 16, 1913
Huculak, Bronislaw	Skaro	401	Dec. 17, 1913
Hallvarson, Peter W.	Black Diamond	612	Dec. 15, 1914
Hart, Wm. A.	Lethbridge	405	Feb. 12, 1914
Harper, Morden	Lethbridge	421	Mar. 14, 1914
Hacke, William	Milk River	439	April 2, 1914
Hanson, Henry L.	Bawlf	459	April 16, 1914
Hess, Thurman C.	Oyen	460	April 16, 1914
Huff, Henry	Provost	461	April 16, 1914
Heald, Ivan	Winnifred	492	April 23, 1914

TRACTION ENGINEERS' Final Certificates.—Continued.

NAME	ADDRESS	NO. OF CERT.	DATE OF ISSUE.
Henry, Charles T.	Bow Island	493	April 23, 1914
Hill, Joseph I.	Ryley	502	April 27, 1914
Hermansen, Carl	Fox	528	June 17, 1914
Hendrickson, Chas. G.	Red Deer	564	Sept. 15, 1914
Hopkins, James W.	Trentville	565	Sept. 15, 1914
Hayes, Daniel W.	Battenberg	573	Sept. 30, 1914
Hennig, Jacob	Stony Plain	574	Sept. 30, 1914
Haun, Burton	Irma	590	Sept. 15, 1914
Henderson, Richard	Raymond	594	Oct. 17, 1914
Hapal, Edward	Edmonton	604	Nov. 19, 1914
Hawrylink, Fred.	Vegreville	605	Nov. 19, 1914
Holcomb, Harry W.	High River	607	Nov. 23, 1914
Hyde, George T.	High River	764	Sept. 14, 1915
Haskins, Martin	Vermillion	751	Sept. 4, 1915
Haughrud, Syver J.	Calgary	706	May 18, 1914
Haarsted, Alfred Berger	Bentley	615	Feb. 10, 1915
Hammer, Olaf	Claresholm	634	Mar. 24, 1915
Heller, Otto M.	Warner	635	Mar. 29, 1915
Haughseth, Hingward	Toffield	648	April 10, 1915
Hedland, Johnnie E.	Greenshields	649	April 10, 1915
Hauer, Pedro	Wiste	666	April 16, 1915
Haner, Cyrus Edgar	Red Willow	667	April 16, 1915
Harvey, Newton	Jarrow	688	April 20, 1915
Haynes, Clay E.	Parkland	702	May 7, 1915
Hutchison, Jarvis E.	Wetaskiwin	759	Sept. 14, 1915
Hunt, Wm. E.	Commerce	765	Sept. 15, 1915
Hamilton, Arthur	Camrose	775	Sept. 20, 1915
Harder, Abraham	Stirlingville	790	Sept. 28, 1915
Henderson, Wm. T.	Okotoks	791	Sept. 28, 1915
Hanson, John Albert	Parkland	809	Oct. 14, 1915
High, Dan	Red Deer	1007	Sept. 13, 1916
Heck, Edgar A.	Stettler	881	April 17, 1916
Hedstrom, Chas. J.	Carbon	835	Mar. 16, 1916
Hauser, Benjamin M.	Strome	880	April 17, 1916
Halle, Anton	St. Paul des Metis	910	April 25, 1916
Hibbs, Leon R.	Mound	944	July 15, 1916
Hampton, Lewis B.	Cardston	946	July 21, 1916
Hoog, Carl M.	Enchant	957	Aug. 17, 1916
Howe, John H.	Carmangay	958	Aug. 17, 1916
Hartman, Robt.	Calgary	964	Aug. 18, 1916
Hayes, John P.	Gleichen	965	Aug. 18, 1916
Hirondelle, John L.	Morinville	1017	Sept. 14, 1916
Hanson, Eugene J.	Innisfree	1028	Sept. 14, 1916
Hansen, Henry A.	Thelma	1033	Sept. 16, 1916
Hodgins, Wellington	Magrath	1038	Sept. 16, 1916
Harvey, Fred. W.	Kipp	1073	Oct. 18, 1916
Iverson, Louis O.	Bismark	29	June 10, 1912
Irving, Frank	Edmonton	302	June 21, 1913
Irwin, Arthur H.	Fort Saskatchewan	741	Aug. 24, 1915
Iwaskow, Mike	Mundare	862	April 12, 1916
Jerome, Earl	Noble	14	May 18, 1912
Johnson, John G.	Suffield	19	May 22, 1912
Johnson, Aug. K.	Strathcona	25	May 29, 1912
Jackson, Lionel A.	Calgary	75	Aug. 20, 1912
Jamieson, Henry W.	Nanton	76	Aug. 20, 1912
Johannsen, Hy. G.	Bergen	113	Sept. 21, 1912
Johnston, Albert E.	Edmonton	117	Sept. 27, 1912

TRACTION ENGINEERS' Final Certificates.—*Continued.*

NAME	ADDRESS	NO. OF CERT.	DATE OF ISSUE.
Johnson, Oscar F.	Strathmore	139	Dec. 18, 1912
Jackline, Morley	Lethbridge	306	July 10, 1913
Johnson, Lars B.	Donalda	186	Mar. 28, 1913
James, William J.	Falkirk	207	April 4, 1913
Julson, Hans G.	Passano	239	April 21, 1913
Jennings, Thomas	Strathmore	240	April 21, 1913
Johnson, John A.	Millet	271	May 10, 1913
Johnson, Louis	Brocket	280	May 15, 1913
Johnson, Cornelius G.	Carlstadt	317	Aug. 6, 1913
Johnson, J. O.	Stoppington	450	Sept. 1, 1915
Johnston, Edwin N.	Yetwood	329	Aug. 12, 1913
Jackson, Adam W.	Coronation	413	Mar. 12, 1914
Johnison, Jacob B.	Reid Hill	449	April 15, 1914
Jackson, And. S.	Richdale	462	April 16, 1914
Jenkins, Reuben R.	Ponoka	463	April 16, 1914
Johnson, Hjalmar B.	Angle Lake	481	April 17, 1914
Johnson, Gunner	Edmonton	537	June 22, 1914
Johnson, John Henry	Bow Island	544	Aug. 12, 1914
James, Thomas	Cochrane	558	Aug. 22, 1914
Johnson, John Edgar	Gwynne	591	Oct. 15, 1914
Johnson, John M.	Monitor	728	Oct. 13, 1915
Jaack, Wallis N.	Mirror	760	Sept. 14, 1915
Jones, Perry W.	Winnifred	766	Sept. 15, 1915
Johnson, Henry E.	Nanton	799	Sept. 28, 1915
Johanson, Oscar E.	Barons	869	April 14, 1916
Johnson, Hjalmar E.	Retlaw	923	May 16, 1916
Johnston, James B.	Cadogan	925	May 17, 1916
Johnson, Johnnie M.	Holden	951	Aug. 15, 1916
Klaparezuk, Stephen	Mundare	121	Oct. 14, 1912
Krodel, John A.	Irvine	55	July 23, 1913
Koester, Clarence G.	Lost Lake	69	Aug. 14, 1912
Kelly, Robert	Calgary	77	Aug. 20, 1912
Kuhl, Edward	Calgary	20	May 22, 1912
Kirsthman, Jacob	Castor	208	April 4, 1913
Knight, Absalom	Sounding Creek	209	April 4, 1913
Klageg, Knut	Calgary	241	April 21, 1913
Killian, Andrew A.	Holden	824	Jan. 25, 1916
Knape, Gus F.	Bassano	318	Aug. 6, 1913
Kruger, Rune H.	Trochu	345	Sept. 16, 1913
Katscherofsky, John	Stony Plain	377	Sept. 25, 1913
Kleparczuk, Michael	Chipman	393	Oct. 22, 1913
Kruschel, Julius	Bowden	414	Mar. 12, 1914
Kenney, Ernest	Calgary	488	April 21, 1914
Kuhl, Adolph	Nanton	494	April 23, 1914
Kvindegard, Lars	Innisfree	552	Aug. 17, 1914
Kirstein, Rudolph	Wetaskiwin	603	Nov. 14, 1914
Kaump, Clarence E.	Lethbridge	614	Jan. 14, 1915
Koroluk, John	Zawale	627	Mar. 19, 1915
Koelsch, Jos. Sam	Bassano	644	April 9, 1915
Krossa, Richard	Leduc	650	April 10, 1915
Kennedy, Lewis Chas.	Veteran	668	April 16, 1915
Knutson, Lewis	Provost	669	April 16, 1915
Kroetsch, Ambrose G.	Hastings Coulee	670	April 16, 1915
Keim, Philip	Acme	712	June 11, 1915
Kanneman, David F.	Lethbridge	716	June 16, 1915
Kellichoie, Victor	Villeneuve	742	Aug. 24, 1915
Kellicut, Frank	Granum	767	Sept. 15, 1915
Kettleson, Ole	Star	776	Sept. 20, 1915
Kirvit, Charles	Edmonton	807	Oct. 13, 1915

TRACTION ENGINEERS' Final Certificates.—Continued.

NAME	ADDRESS	NO. OF CERT.	DATE OF ISSUE.
Kennedy, James E.	Camrose	818	Nov. 17, 1915
Kone, Norman W.	Calgary	920	May 16, 1916
Kelly, Nicholas	Bulwark	882	April 17, 1916
Krouse, Amil	Mewassin	976	Aug. 24, 1916
Kincade, Fred F.	Nobleford	1049	Sept. 20, 1916
Knull, Rudolph	Leduc	1077	Oct. 24, 1916
Knapp, Merritt A.	Nanton	1085	Nov. 13, 1916
Kelley, Hugh S.	Lethbridge	1091	Dec. 11, 1916
Loomer, Chas. S.	Endiang	6	May 13, 1912
Langer, Paul	Eckville	30	June 10, 1912
Lyon, Jay	Claresholm	35	June 14, 1912
Latta, Charles W.	Tofield	39	June 17, 1912
Lawin, Frank E.	Pine Creek	59	Aug. 12, 1912
Lawler, Joseph W.	Lethbridge	70	Aug. 14, 1912
Lefebvre, Adelard J.	Irvine	72	Aug. 14, 1912
Litke, Steve	Gleichen	78	Aug. 20, 1912
Lynn, John W.	Crossfield	101	Sept. 19, 1912
Lerbeckmo, Peter	Bardo	112	Sept. 20, 1912
Lagrasse, John L.	Edison	275	May 14, 1913
Love, Charles M.	Lethbridge	150	Feb. 19, 1913
Lindquist, John A.	Bigstone	218	April 7, 1913
Loewen, Jacob D. R.	Sunnyslope	219	April 7, 1913
Lapierre, Joseph	Duvernay	235	April 17, 1913
Lucas, Jacob A.	Calgary	242	April 21, 1913
Levers, Reginald	Munson	243	April 21, 1913
Long, Arth. S.	Bassano	245	April 21, 1913
Lawson, Harry	Edgerton	261	April 26, 1913
Lawin, Edward A.	Pine Creek	262	April 26, 1913
Lindblad, Henning	Spring Coulee	281	May 15, 1913
Lyon, Herbert T.	Calgary	323	Aug. 11, 1913
Lindquist, Arthur	Czar	346	Sept. 16, 1913
Leicht, David	Hanna	347	Sept. 16, 1913
LaValley, Lawrence	Carmangay	354	Sept. 18, 1913
Lee, Ole J.	Bow Island	355	Sept. 18, 1913
Lepard, Norman	Claresholm	356	Sept. 18, 1913
Lovering, Eroul E.	Iron Springs	357	Sept. 18, 1913
Lee, Henry	Wetaskiwin	378	Sept. 25, 1913
Lindsay, Charles B.	Greenshields	379	Sept. 25, 1913
Lobb, Rodmond	Edmonton	380	Sept. 25, 1913
Lund, Otto O.	Holden	381	Sept. 25, 1913
Letourneau, Leo. M.	High River	397	Nov. 8, 1913
Loney, Thos. E.	Donalda	419	Mar. 12, 1914
Linder, Thos. W.	Spring River	424	Mar. 14, 1914
Lorentson, Emil	Vandyne	464	April 16, 1914
Labby, George	LaCalmette	503	April 27, 1914
Lock, James W.	Champion	529	June 17, 1914
Long, Reginald Edgar	Bassano	531	June 20, 1914
Leedholm, Gust. T.	Lougheed	566	Sept. 15, 1914
Lockhart, Frederick R.	Edmonton	575	Sept. 30, 1914
Lund, Ole O.	Viking	597	Oct. 19, 1914
Lindholm, Roger	Calgary	599	Oct. 20, 1914
Lees, William	Edmonton	610	Dec. 11, 1914
Loughheed, Henry W.	Nanton	613	Dec. 17, 1914
Lee, Thomas H.	Olds	1058	Oct. 14, 1916
Lundy, John Edward	Calgary	618	Feb. 20, 1915
Lambert, Alex.	Duvernay	628	Mar. 19, 1915
Lapierre, Philippe	Coleman	630	Mar. 23, 1915
Lefevre, Elzear	Irvine	645	April 9, 1915
Leithelser, Matthew	Rosenheim	671	April 16, 1915
Loney, Godthard	Donalda	672	April 16, 1915
Locke, Roy	Champion	721	July 14, 1915

TRACTION ENGINEERS' Final Certificates.—Continued.

NAME	ADDRESS	NO. OF CERT.	DATE OF ISSUE.
Lloyd, William	Lethbridge	768	Sept. 15, 1915
Loveseth, Enoch L.	Camrose	803	Oct. 12, 1915
Little, William H.	Lethbridge	979	Aug. 24, 1916
Lagasse, Frank	Westlock	840	April 6, 1916
Lorentson, Inman	Vandyne	850	April 7, 1916
Leper, William T.	Wastina	852	April 7, 1916
Lewis, Sam	Monitor	883	April 17, 1916
Lamb, Harry J.	Fort Saskatchewan ..	911	April 25, 1916
Labbe, Arthur	St. Paul des Metis ..	912	April 25, 1916
Lee, James Robt.	Delia	921	May 16, 1916
Langell, Walter Geo.	Edmonton	977	Aug. 24, 1916
Lamire, Joseph	Legal	978	Aug. 24, 1916
Loveseth, Lars E.	Camrose	995	Sept. 11, 1916
Leitheiser, Nicholas	Rosenheim	996	Sept. 11, 1916
Lantz, Axel	Millett	1018	Sept. 14, 1916
Larson, Ivan	Claresholm	1061	Oct. 16, 1916
Lanktree, Francis A.	Clyde	1078	Oct. 24, 1916
Louargand, Francois	Lac La Biche	1090	Dec. 9, 1916
Magill, Otis D.	Calgary	79	Aug. 20, 1912
Matti, Adolf	Macleod	93	Sept. 17, 1912
Maki, Gust	Sylvan Lake	135	Nov. 12, 1912
Mullane, Chris. D.	Lethbridge	836	Mar. 22, 1916
Marty, Robert, Jr.	Carlstadt	315	July 30, 1913
Muir, George S.	Pincher Creek	162	Mar. 14, 1913
Melnyk, Joseph	Lamont	170	Mar. 26, 1913
Madden, Ferd C.	Cardston	201	Mar. 29, 1913
Morgonroth, Emil	Langdon	220	April 7, 1913
Marty, Oscar	Suffield	221	April 7, 1913
Mitchell, William A.	Tofield	264	April 26, 1913
Manske, Gustav	Macklin	268	May 3, 1913
Mark, Leonard	Mannville	269	May 3, 1913
Mundell, David L.	Cherhill	276	May 14, 1913
Martin, Harvey R.	Namaka	296	June 18, 1913
Moore, George	Winnifred	298	June 19, 1913
Mead, Russell	Calgary	989	Aug. 29, 1916
Minchon, John	Bruce	334	Aug. 21, 1913
Moss, John B.	Stavely	353	Sept. 18, 1913
Maynard, Frank	Britain	388	Oct. 10, 1913
Marshall, Charles Theo.	Spring Point	422	Mar. 14, 1914
Mitchell, Robert Geo.	Tofield	435	April 2, 1914
Martin, James E.	Mecheche	466	April 16, 1914
Moe, Alfred	Perbeck	467	April 16, 1914
Mjolsness, Alfred	Didsbury	468	April 16, 1914
Maurer, Alfred Robert	Hussar	520	May 18, 1914
Murschel, Emmanuel	Calgary	532	June 20, 1914
Morris, Creed R.	Nobleford	546	Aug. 12, 1914
Maxwell, Henry C.	Claresholm	547	Aug. 12, 1914
Manning, Henry B.	Amisk	576	Sept. 30, 1914
Martin, Wm. Henry	Bremner	577	Sept. 30, 1914
Miller, Ludwig	Edmonton South	578	Sept. 30, 1914
Magee, William C.	Parkland	600	Oct. 20, 1914
Messner, John F.	Hastings Coulee	771	Sept. 17, 1915
Milligan, Morris	Purple Springs	749	Aug. 24, 1915
Mitchell, Charles	Parkland	619	Feb. 20, 1915
Morasse, Gideon	Morinville	637	April 5, 1915
Mullen, Alvin Otto	Wastina	642	April 8, 1915
Moose, Chris.	Logan	651	April 10, 1915
Mitchell, David H.	Tofield	652	April 10, 1915
Magenitey, Arminesus	Killam	673	April 16, 1915
Mezel, Wm. J.	Cadogan	674	April 16, 1915
Meikle, Walter	Cadogan	675	April 16, 1915
Moore, Wm. James	Camrose	676	April 16, 1915

TRACTION ENGINEERS' Final Certificates.—Continued.

NAME	ADDRESS	NO. OF CERT.	DATE OF ISSUE.
Martin, John	Monitor	700	May 7, 1915
Munson, Joseph	Reid Hill	703	May 7, 1915
Metheny, Raymond	Kinmundy	713	June 11, 1915
Marvin, Walter	Drumheller	714	June 11, 1915
Morrison, Wm.	Lethbridge	769	Sept. 15, 1915
Mocherman, Walter	Lone Butte	792	Sept. 28, 1915
Mole, John	Lacombe	804	Oct. 12, 1915
Mellon, George E.	Edmonton	808	Oct. 13, 1915
Mortelette, H. C.	Edmonton	1056	Oct. 5, 1916
Morris, A. Robert	Bremner	841	April 6, 1916
Mager, Richard	Fort Saskatchewan	863	April 12, 1916
Miller, Percy P.	Calgary	917	April 27, 1916
Metcalfe, John	Calgary	922	May 16, 1916
Merriken, Leroy S.	Veteran	930	June 8, 1916
Maloff, Moikal	Lundbreck	932	June 10, 1916
Murray, Elias J.	Drumheller	966	Aug. 18, 1916
Miller, Henry Chas.	Winterburn	981	Aug. 24, 1916
Miskiwi, Samuel	Mundare	982	Aug. 24, 1916
Moore, Harley	Standard	1009	Sept. 13, 1916
Minchau, Charlie	Edmonton	1019	Sept. 14, 1916
Main, John	Pincher Creek	1052	Sept. 20, 1916
Meyers, Chas. Edward	Calgary	1070	Oct. 17, 1916
McCoy, Martin H.	Coaldale	15	May 18, 1912
McGhan, Lloyd James	Clover Bar	60	Aug. 12, 1912
McNab, Duncan	Kipp	96	Sept. 17, 1912
McDowell, Grant S.	Vulcan	124	Oct. 17, 1912
McNarland, Robert J.	Granum	338	Aug. 29, 1913
McGinnis, John W.	Lethbridge	374	Sept. 23, 1913
McKeage, Alfred	Aldersyde	338	Mar. 29, 1916
McWhirter, And. L.	Round Hill	225	April 10, 1913
McLeod, Alex.	Walsh	230	April 15, 1913
McKinney, Heber	Suffield	231	April 15, 1913
McLeod, James	Paradise Valley	263	April 26, 1913
McNally, Roy	Alsask	314	July 22, 1913
McKenzie, Rod	Midnapore	389	Oct. 13, 1913
McDonald, Wm.	Edmonton	406	Feb. 16, 1914
McGowan, Wm.	Castor	415	Mar. 12, 1914
McGinnis, James	Cowley	429	Mar. 24, 1914
McFadden, Charles B.	Edmonton	434	April 2, 1914
McKay, Malcolm	Carmangay	450	April 15, 1914
McNabb, A. B.	Chinook	465	April 16, 1914
McMullen, Robert	Downing	482	April 17, 1914
McCaughey, Frank H.	Bassano	495	April 23, 1914
McCaig, Clifford Roy	Wainwright	504	April 27, 1914
McCoy, Joseph Ed.	Edmonton	515	April 29, 1914
McGhan, James	Bremner	516	May 7, 1914
MacDougall, Leonard	Keephills	523	May 19, 1914
McGowan, John M.	Richdale	557	Aug. 22, 1914
McBeth, James Austin	Tofield	579	Sept. 30, 1914
McIntee, James	Beaver Mines	819	Nov. 20, 1915
McCormick, Donald J.	Calgary	793	Sept. 28, 1915
McGowan, Wilmer H.	Richdale	701	May 7, 1915
McDonald, William S.	Lethbridge	991	Sept. 8, 1916
McLauchlin, William Floyd	Red Deer	834	Mar. 13, 1916
McLeod, Elmer A.	Mirror	884	April 17, 1916
McLeod, Frank E.	Oxville	939	July 6, 1916
McLeod, Cliff	Warner	947	July 21, 1916
McDonald, Alexander	Calgary	967	Aug. 18, 1916
McDonald, Duncan G.	Wetaskiwin	980	Aug. 24, 1916
McLeod, John	Flagstaff	997	Sept. 11, 1916
McLean, Daniel D.	Calgary	1008	Sept. 13, 1916
McCroskey, John M.	Granum	1050	Sept. 20, 1916

TRACTION ENGINEERS' Final Certificates.—*Continued.*

NAME	• ADDRESS	NO. OF CFRT.	DATE OF ISSUE.
McKibben, Edwin H.	Granum	1051	Sept. 20, 1916
McNeill, John	DeWinton	1069	Oct. 17, 1916
McAllister, William	Oyen	1074	Oct. 19, 1916
McFarlane, George W.	Chipman	1079	Oct. 24, 1916
Nichols, Edward A.	Bow Island	153	Mar. 10, 1912
Narkaus, Thomas	Granum	168	Mar. 19, 1912
Nickerson, Joseph H.	Strome	171	Mar. 26, 1912
Nulph, James G.	Sedgewick	187	Mar. 28, 1912
Nelson, Norman	Cadogan	188	Mar. 28, 1912
Norton, Russell J.	Richdale	246	April 21, 1912
Nelson, Ernest W.	Calgary	125	Oct. 19, 1912
Nemsgern, Nicholas	Claresholm	94	Sept. 17, 1912
Norris, Roy James	Lethbridge	95	Sept. 17, 1912
Northern, B. W.	Calgary	324	Aug. 11, 1913
Nafziger, Joseph G.	Vulcan	358	Sept. 18, 1913
Nichol, James	Langdon	369	Sept. 20, 1913
Nelson, Sanford E.	Yeoford	403	Jan. 12, 1914
Nichols, Roy A.	Donalda	469	April 16, 1914
Nelson, Nels C.	Edmonton	505	April 27, 1914
Neutzling, John	Bashaw	526	June 13, 1914
Noyak, Isidore E.	Vegreville	553	Aug. 17, 1914
Norberg, John	Boyne Lake	592	Oct. 15, 1914
Newsom, Dana Ray	Bassano	646	April 9, 1915
Norlie, Hackon C.	Edmonton	983	Aug. 24, 1916
Neste, Martin	Cadogan	885	April 17, 1916
Nordin, John G.	Czar	886	April 17, 1916
Nixon, Eldon J.	Sterlingville	968	Aug. 18, 1916
Nichols, Samuel	Edmonton	1020	Sept. 14, 1916
Nadeau, Edmund	Waugh	1021	Sept. 14, 1916
Nyblad, Oscar W.	Clyde	1022	Sept. 14, 1916
Ogden, Herman E.	Pincher City	34	June 14, 1912
Olson, Oscar T.	Hutton	49	July 18, 1912
Osterloh, George	Pleasington	144	Feb. 12, 1913
Olsgard, Arthur	Halkirk	189	Mar. 28, 1913
Owen, Arthur	Bassano	222	April 7, 1913
O'Neil, James W.	Winnifred	232	April 15, 1913
O'Connor, Tim	Mannville	236	April 17, 1913
Overgard, Jacob	Crossfield	247	April 21, 1913
Ostheller, Ferdinand	Trochu	348	Sept. 16, 1913
Owre, Angus L.	Daysland	470	April 16, 1914
Osell, William J.	Midnapore	569	Sept. 21, 1914
Olsen, Andrew B.	Irma	593	Oct. 15, 1914
O'Neil, John H.	Crossfield	632	Mar. 26, 1915
Osteby, Halfdan	Coutts	636	Mar. 29, 1915
O'Donnell, Peter	Purple Springs	699	April 27, 1915
Olsen, Axel E.	Innisfree	743	Aug. 24, 1915
O'Neill, Wm. T.	Edmonton	744	Aug. 24, 1915
Oseiczuk, Samuel	Mundare	864	April 12, 1916
Overend, Earl S.	Provost	913	April 25, 1916
Oertle, William	Killam	940	July 6, 1916
Osterhout, William H.	Irma	984	Aug. 24, 1916
Perrin, Charles A.	Calgary	50	July 18, 1912
Pearson, Vernon	Lethbridge	54	July 19, 1912
Pennington, Wm.	Lethbridge	136	Nov. 13, 1912
Pearson, Augustus	Bellevue	163	Mar. 19, 1913
Proudley, Harry	Lethbridge	154	Mar. 10, 1913
Peterson, Henry A.	Ohaton	190	Mar. 28, 1913
Pettie, Lewis L.	Castor	210	April 4, 1913
Pudwell, Henry	Medicine Hat	233	April 15, 1913
Paulin, Henry	Vegreville	237	April 17, 1913

TRACTION ENGINEERS' Final Certificates.—*Continued.*

NAME	ADDRESS	NO. OF CERT.	DATE OF ISSUE.
Parken, Walter	Calgary	248	April 21, 1913
Perry, George H.	Perbeck	293	June 16, 1913
Palmer, Wilfred	Albay	299	June 19, 1913
Peabody, Harvey M.	Calgary	349	Sept. 16, 1913
Phelps, Harvey J.	Toffield	335	Aug. 21, 1913
Paulson, John M.	Barons	359	Sept. 18, 1913
Petit, Moise	Edmonton North	382	Sept. 25, 1913
Pinkham, Edwin S.	Leslieville	390	Oct. 13, 1913
Pettie, Earl L.	Castor	416	Mar. 12, 1914
Peters, Henry H.	Carbon	430	Mar. 25, 1914
Peterson, Einer A.	Major	440	April 6, 1914
Phillips, Thomas H.	Holden	483	April 17, 1914
Perkins, Percy J.	Richdale	519	May 13, 1914
Patterson, Norman J.	Nobleford	530	June 17, 1914
Pue, William H.	Cheadle	533	June 20, 1914
Parrent, Alexander	Jeffrey	580	Sept. 30, 1914
Peterson, Robert T.	Gleichen	601	Oct. 20, 1914
Palar, Henry	Wanda	755	Sept. 10, 1915
Padden, Thomas	Medicine Hat	654	April 10, 1915
Portner, Edward Chas.	Innisfree	620	Feb. 20, 1915
Paetz, Martin	Bigstone	643	April 8, 1915
Peden, Walter E.	Gadsby	677	April 16, 1915
Portway, Peter D.	Hayter	678	April 16, 1915
Phillips, Ruby C.	Samsonton	694	April 23, 1915
Ponton, Louis	Colinton	719	July 13, 1915
Panas, Dmyter	Copernick	745	Aug. 24, 1915
Pasymko, Pawlo	Scaro	777	Sept. 20, 1915
Priestman, David D.	Edmonton	778	Sept. 20, 1915
Pearce, Gilbert E.	Edmonton	1057	Oct. 5, 1916
Podmurny, John	Mundare	842	April 6, 1916
Philpuk, William	Musidora	865	April 12, 1916
Paananen, Einas	Hayhurst	887	April 17, 1916
Pottorff, Arthur E.	Edmonton	924	May 16, 1916
Perks, Arthur E.	Monitor	926	May 17, 1916
Parker, Glenn W.	Brant	959	Aug. 17, 1916
Palmer, Harry K.	Killam	985	Aug. 24, 1916
Patterson, William G.	Edmonton	986	Aug. 24, 1916
Pearce, Harry S.	Edmonton	987	Aug. 24, 1916
Palmateer, Albert L.	Lougheed	.998	Sept. 11, 1916
Palamark, Daniel	Smoky Lake	1023	Sept. 14, 1916
Popoff, John J.	Lundbreck	1041	Sept. 15, 1916
Parker, Vernon F.	Brant	1062	Oct. 16, 1916
Quebec, Wm. F.	Radway Centre	779	Sept. 20, 1915
Quist, John R.	Metiskow	888	April 17, 1916
Robertson, Donald	Medicine Hat	36	June 14, 1912
Rowlands, Hugh G.	Delroys	51	July 18, 1912
Rennie, James C.	Yetwood	71	Aug. 14, 1912
Rhoads, George	Calgary	80	Aug. 20, 1912
Rickey, Foster	Lethbridge	97	Sept. 17, 1912
Richardson, C. E.	Carstairs	146	Feb. 13, 1913
Rifford, Thaddeus	Stavelly	149	Feb. 19, 1913
Ravensborg, Harry	Asker	191	Mar. 28, 1913
Roberts, Delbert	West Wingham	192	Mar. 28, 1913
Ramsey, Frank	West Wingham	211	April 4, 1913
Rousche, Claud	Gleichen	223	April 7, 1913
Roneberg, Edward	Eagle Hill	249	April 21, 1913
Raitz, Charles E.	Warner	282	May 15, 1913
Ross, Anson Charles	Lethbridge	300	June 19, 1913
Roth, Gustave	Leduc	336	Aug. 21, 1913
Radcliffe, Fred M.	Stony Plain	337	Aug. 21, 1913
Ross, Chas. Chris.	Innisfail	350	Sept. 16, 1913

TRACTION ENGINEERS' Final Certificates.—*Continued.*

NAME	ADDRESS	NO. OF CERT.	DATE OF ISSUE.
Rhoads, Harvey L.	Calgary	370	Sept. 20, 1913
Rhyason, William	Strome	394	Oct. 22, 1913
Robb, Charles	Bassano	521	May 18, 1914
Richards, Alex.	Sullivan Lake	527	June 13, 1914
Richards, Benjamin M.	Strome	554	Aug. 17, 1914
Rathbun, Lucius F.	High River	559	Aug. 22, 1914
Robbins, Asahel S.	Peace River Crossing	570	Sept. 23, 1914
Reddick, Robert E.	Calgary	602	Oct. 20, 1914
Rusk, Andrew P.	New Dayton	727	Aug. 7, 1915
Rogers, Clifford R.	Edmonton	795	Sept. 28, 1915
Robarge, Edward	St. Paul des Metis	629	Mar. 19, 1915
Robertson, Wm. Helmuth	Medicine Hat	655	April 10, 1915
Rhodes, Richard	Caroline	679	April 16, 1915
Ronneberg, Arnold	Eagle Hill	680	April 16, 1915
Ringland, David E.	Macleod	717	June 16, 1915
Ruth, Herbert G.	Macklin	729	Aug. 13, 1915
Richards, Hyrum	Aetna	770	Sept. 15, 1915
Rollag, John O.	Wrentham	784	Sept. 21, 1915
Ringle, Cecil S.	High River	794	Sept. 28, 1915
Richards, J. Vateis	Aetna	821	Dec. 13, 1915
Robertson, James M.	Calgary	831	Mar. 13, 1916
Radway, Chas. H.	Clover Bar	828	Feb. 14, 1916
Roberts, Justin C.	Pendant d'Oreille	833	Mar. 14, 1916
Rasmussen, L. L.	Griffin Creek	839	April 4, 1916
Raser, Edward W.	Lethbridge	870	April 14, 1916
Rhodes, Roy	Caroline	889	April 17, 1916
Ross, Robert Alex.	Scollard	890	April 17, 1916
Rowe, Leroy	Whatcheer	891	April 17, 1916
Robinson, George L.	Coutts	960	Aug. 17, 1916
Roueché, George D.	Gleichen	969	Aug. 18, 1916
Robinson, Henry L.	Queenstown	1010	Sept. 13, 1916
Richards, Warren	Athabasca	1024	Sept. 14, 1916
Rogers, Charles Archer	Edmonton	1025	Sept. 14, 1916
Rotter, Nicholas	Edmonton	1030	Sept. 14, 1916
Rogers, Seth S.	Turin	1042	Sept. 16, 1916
Rasmussen, Thorvald	Standard	1071	Oct. 17, 1916
Smith, Rowland	Caseleyville	7	May 13, 1912
Scheersmidt, Bernhardt	Stettler	8	May 13, 1912
Smith, Manley	Olds	11	May 15, 1912
Scott, William J.	Bassano	21	May 22, 1912
Stauffer, John L.	Round Hill	24	May 29, 1912
Scott, Allan O.	Kinsella	42	July 16, 1912
Stott, John J.	Hardisty	43	July 16, 1912
Sidey, Elmer	Jethson	52	July 18, 1912
Sandstrom, Axel	Calmar	61	Aug. 12, 1912
Schultz, Fred H.	Bruderheim	62	Aug. 12, 1912
Samuelson, Lorantz	Cummings	63	Aug. 12, 1912
Stewart, William J.	Hughenden	81	Aug. 22, 1912
Straus, Fred J.	Stavely	98	Sept. 17, 1912
Scott, Robert T.	Cayley	108	Sept. 19, 1912
Stevenson, Ivie W.	Calgary	109	Sept. 19, 1912
Stewart, Martin O.	Calgary	110	Sept. 19, 1912
Smith, Aug. W. DeH.	Paddle River	114	Sept. 20, 1912
Snell, Edward	Bittern Lake	118	Sept. 27, 1912
Scheideman, John	Mewassin	120	Oct. 10, 1912
Streich, Daniel	Content	145	Feb. 12, 1913
Senff, Ernest W.	Blackie	159	Mar. 14, 1913
Stuckey, Richard P.	Calgary	160	Mar. 14, 1913
Sorge, Otto R.	Pincher Creek	164	Mar. 19, 1913
Sharlow, Henry T.	Wetaskiwin	193	Mar. 28, 1913
Shantz, Wilfred S.	Didsbury	212	April 4, 1913
Semple, Hugh	Chauvin	265	April 26, 1913

TRACTION ENGINEERS' Final Certificates.—Continued.

NAME	ADDRESS	NO. OF CERT.	DATE OF ISSUE.
Swift, George H.	Magin	270	May 3, 1913
Stoner, Edgar C.	Lacombe	272	May 12, 1913
Shank, Eddie J.	Athabasca	277	May 14, 1913
Shank, Philip	Athabasca	278	May 14, 1913
Sims, John B.	Namaka	295	June 18, 1913
Shelton, Henry	Edmonton	303	June 21, 1913
Symington, George	Edmonton	304	June 21, 1913
Sheets, William H.	Viking	313	July 17, 1913
Smith, Charles	Gladby	320	Aug. 9, 1913
Sterling, Edward J.	Sterlingville	351	Sept. 16, 1913
Sear, Robert J.	Calgary	371	Sept. 20, 1913
Schultze, Otto	Edmonton	383	Sept. 25, 1913
Sheets, Lloyd	Rosenroll	384	Sept. 25, 1913
Saunders, Leslie J.	Olds	395	Nov. 7, 1913
Sutton, Henry H.	Calgary	398	Nov. 8, 1913
Smith, George W.	Edmonton S.	408	Feb. 16, 1914
Slater, Ray L.	Consort	417	Mar. 12, 1914
Shaw, Rollie W.	Nanton	425	Mar. 14, 1914
Steen, Arnold	Bardo	436	April 2, 1914
Scott, Ernest S.	Gleichen	442	April 6, 1914
Shankey, Wm. John	Rose Lynn	471	April 16, 1914
Shepard, Walter	New Brigden	472	April 16, 1914
Sorenson, Andrew	Killam	473	April 16, 1914
Sprague, Loren W.	Monitor	474	April 16, 1914
Steele, Robert J.	Cadogan	475	April 16, 1914
Schmidt, Louis	Brightview	476	April 16, 1914
Strauman, Carl	Islay	484	April 17, 1914
Schlosser, Seymour	Mosside	485	April 17, 1914
Spring, Henry C.	Bow Island	496	April 23, 1914
Stoddart, Charles	Paradise Valley	506	April 27, 1914
Steffes, Alva A.	Morinville	509	April 27, 1914
Sherbeck, Carl O.	Wetaskiwin	543	Aug. 11, 1914
Stevens, Levi	Inga	581	Sept. 30, 1914
Steinbach, John	Vegreville	582	Sept. 30, 1914
Suder, George	Spruce Grove	583	Sept. 30, 1914
Simmons, Fred	Fort Saskatchewan ..	598	Oct. 19, 1914
Shaffer, William J.	Cravath Corners	611	Dec. 11, 1914
Sanborn, Francis A.	Innisfail	625	Mar. 18, 1915
Sills, Jerry	Penhold	616	Feb. 15, 1915
Scott, George	Pine Lake	623	Mar. 12, 1915
Stratton, Gilbert C.	Wessington	681	April 16, 1915
Slifka, James Charles	Botha	682	April 16, 1915
Sundberg, Henry	Daysland	683	April 16, 1915
Spier, Alex.	Innisfree	689	April 20, 1915
Schaub, Jacob J.	Plamondonville	690	April 20, 1915
Snell, George	Chauvin	691	April 20, 1915
Swan, Jeff	Chauvin	692	April 20, 1915
Southwood, Thomas J.	Crossfield	695	April 23, 1915
Shaw, Robert John	Edmonton	698	April 27, 1915
Stewart, George Wallis	Ponoka	711	June 10, 1915
Schwank, Gustave	Bruderheim	715	June 15, 1915
Schmidt, Edward	Wetaskiwin	720	July 13, 1915
Schukar, Robert J.	Didsbury	730	Aug. 13, 1915
Stearns, Lyle	Stirlingville	733	Aug. 19, 1915
Smart, Grover C.	Salemead	734	Aug. 19, 1915
Schumaker, Jos. A.	Stavely	737	Aug. 20, 1915
Spannel, Louis	Wetaskiwin	746	Aug. 24, 1915
Strain, George Edwin	Altorado	753	Sept. 10, 1915
Simons, Charles	Rimbey	761	Sept. 14, 1915
Simpson, Harry	Merna	762	Sept. 14, 1915
Sims, James E.	Edmonton	780	Sept. 20, 1915
Spallin, George W.	Fort Saskatchewan ..	781	Sept. 20, 1915
Schafer, Linley	Tudor	796	Sept. 28, 1915

TRACTION ENGINEERS' Final Certificates.—Continued.

NAME	ADDRESS	NO. OF CERT.	DATE OF ISSUE.
Snider, Emmanuel C.	Blackie	797	Sept. 28, 1915
Snyder, Joseph E.	Mere	798	Sept. 28, 1915
Smith, Joseph H.	Lethbridge	810	Oct. 14, 1915
Stulz, Frank	St. Albert	1055	Oct. 3, 1916
Stevens, Harry L.	Olds	1080	Nov. 7, 1916
Sagmoen, Peter E.	Chauvin	1081	Nov. 9, 1916
Sloan, Claud A.	Cappon	853	April 7, 1916
Schrader, Walter E.	Harmattan	892	April 17, 1916
Switzer, Edgar	Castor	893	April 17, 1916
Shier, Frank	Cayley	918	April 27, 1916
Sherstobitoff, Wassily G. .	Lundbreck	933	June 10, 1916
Smith, Alexander	Ensign	936	June 13, 1916
Scarfe, Aubry	Innisfail	945	July 15, 1916
Showalter, John M.	Lethbridge	948	July 21, 1916
Soberg, Ole	Clemens	970	Aug. 18, 1916
Sambert, Rheinhold	Bruderheim	988	Aug. 24, 1916
Stultz, Thereis	Sibbald	990	Sept. 2, 1916
Scott, Ray E.	Halkirk	999	Sept. 11, 1916
Spohn, John	Strome	1001	Sept. 11, 1916
Schuster, Jacob	Golden Spike	1026	Sept. 14, 1916
Salchenberger, William A. .	Bassano	1034	Sept. 14, 1916
Strack, Edward F.	Stavely	1053	Sept. 20, 1916
Schneider, Charles	Lethbridge	1063	Oct. 16, 1916
Spencer, John M.	Lethbridge	1064	Oct. 16, 1916
Sunderman, Herman	Heisler	1067	Oct. 17, 1916
Schultz, Michael	Spruce Grove	1087	Nov. 22, 1916
Tellesen, Alex.	Ingleton	9	May 13, 1912
Tupper, Roy O.	Entwistle	23	May 29, 1912
Thordarson, Chris.	Clover Bar	44	July 16, 1912
Thompson, Charles	Bow Island	99	Sept. 17, 1912
Trudgeon, Thomas	High River	147	Feb. 13, 1913
Thoenke, William	Magrath	151	Feb. 19, 1913
Tweedle, Hawland T.	Fishburn	165	Mar. 19, 1913
Tucker, Leroy C.	Stavely	169	Mar. 19, 1913
Tronson, Ludwig M.	Asker	194	Mar. 28, 1913
Tenny, Harry E.	Warner	198	Mar. 31, 1913
Tomfohr, Henry H.	Milk River	202	Mar. 29, 1913
Tweedt, Thomas	Sundial	283	May 15, 1913
Thompson, S. Bert	High River	311	July 15, 1913
Thomas, Henry Sanford ...	Altorado	319	Aug. 6, 1913
Taje, Edwin B.	Gwynne	352	Sept. 16, 1913
Townsend, Albert E.	Mabville	385	Sept. 25, 1913
Thompson, Loren	Coronation	418	Mar. 12, 1914
Tierny, James John	Banff	441	April 6, 1914
Tinsley, Jesse C.	Taber	451	April 15, 1914
Thompson, Charles	Dickson	477	April 16, 1914
Trieglaff, John	Irvine	497	April 23, 1914
Turner, Alex. H. E.	Pakan	507	April 27, 1914
Thomas, Edward	Bassano	534	June 20, 1914
Transgard, Thomas E.	Lacombe	538	July 14, 1914
Teubner, Wilson Everett ...	Winnifred	647	April 9, 1915
Taggart, William	Ranching	684	April 16, 1915
Tigner, Clarence R.	Blackie	722	July 14, 1915
Tallman, Merdo S.	Alix	731	Aug. 13, 1915
Tutti, Olmer W.	Edmonton	747	Aug. 24, 1915
Taylor, James	Pine Creek	782	Sept. 20, 1915
Towler, John W.	Sedgwick	919	May 6, 1916
Tesar, Frank	Sexsmith	837	Mar. 29, 1916
Thill, Frank	Stony Plain	843	April 2, 1916
Tupper, Archelaus	Athabasca	844	April 6, 1916
Tudor, Guy M.	New Dayton	871	April 14, 1916
Tangen, Knut	Dolcy	894	April 17, 1916

TRACTION ENGINEERS' Final Certificates.—Continued.

NAME	ADDRESS	NO. OF CERT.	DATE OF ISSUE.
Taylor, Ross	Gallahead	895	April 17, 1916
Tuttle, Simon Henry	Pendant d'Oreille	953	Aug. 16, 1916
Turnquist, Charles R.	Standard	971	Aug. 18, 1916
Underwood, Elmer A.	Gadsby	10	May 13, 1912
Utas, Charles	Manfred	132	Nov. 7, 1912
Utas, Christopher	Water Glen	64	Aug. 14, 1912
Valcour, Alga	Riviere Qui Barre ...	45	July 16, 1912
Van Horn, William	Gleichen	103	Sept. 19, 1912
Venus, George E. W.	Hand Hills	372	Sept. 20, 1913
Varty, Walter	Pine Canyon	426	Mar. 14, 1914
Van Dewark, Wallis B.	Flagstaff	685	April 16, 1915
Van Dewark, H. O.	Hardisty	896	April 17, 1916
Vandenberg, Evert D.	Carstairs	1011	Sept. 11, 1916
Willson, William	Manyberries	16	May 18, 1912
Watters, Chas. A.	Calgary	22	May 22, 1912
Weatherhead, Marsden	Lethbridge	410	Feb. 21, 1914
Ward, Luman G.	Athabasca Landing ..	783	Sept. 21, 1915
Whitney, John E.	Iola	47	July 17, 1912
Williamson, Charles W.	Claresholm	100	Sept. 17, 1912
Wismer, Henry F.	Nanton	102	Sept. 19, 1912
Wells, Edwin Newton	Cluny	104	Sept. 19, 1912
Wiltzen, Norman	Chipman	119	Sept. 27, 1912
Walker, Earl A.	Airdrie	148	Feb. 13, 1913
Wocknitz, Edward	Lethbridge	155	Mar. 10, 1913
Wood, James Alex.	Grande Prairie	172	Mar. 26, 1913
Walkermeyer, Wm. H.	Camrose	195	Mar. 28, 1913
Walkermeyer, Theo. W.	Camrose	196	Mar. 26, 1913
Wilson, Ralph C.	Camrose	197	Mar. 26, 1913
Whitnack, Roy A.	Ensleigh	213	April 4, 1913
Wallace, Lewis B.	Heath	266	April 26, 1913
Ward, Benj. W.	Loverna	340	Sept. 9, 1913
Whitehead, Bert	Claresholm	360	Sept. 18, 1913
Winge, Hugo	Stavely	361	Sept. 18, 1913
Walgren, Clarence E.	Vulcan	373	Sept. 20, 1913
Whitford, John A.	Pakan	386	Sept. 25, 1913
Woolhouse, William H.	Thibald	387	Sept. 25, 1913
Wiese, Fred C.	Lethbridge	399	Nov. 8, 1913
Wickens, J. A.	Cayley	560	Sept. 10, 1914
Wentz, Earl R.	Medicine Hat	518	May 13, 1914
Wideman, Ivy H.	Mayton	404	Feb. 12, 1914
Westar, John H.	Edmonton	437	April 2, 1914
Winkler, John G.	Taber	452	April 15, 1914
Weaver, Guy V.	Calgary	489	April 21, 1914
Wojcik, Egnats	Bow Island	498	April 23, 1914
Wojcik, Charles	Bow Island	499	April 23, 1914
Watts, Charles D.	Rising Sun	510	April 27, 1914
Wagar, Jacob E.	Medicine Hat	517	May 13, 1914
Waldis, Hieronymus	Calgary	522	May 18, 1914
Willoughby, Charles	Edmonton	524	May 19, 1914
Winbigler, Zerotus F.	Shaftesbury	571	Sept. 23, 1914
Wolverton, John C.	Tawatinaw	584	Sept. 30, 1914
Waldron, Walter S.	Clive	624	Mar. 12, 1915
West, Wm. W.	Metiskow	686	April 16, 1915
Weims, Joseph M.	Rockyford	707	May 18, 1915
Walkey, Henry H.	Aetna	738	Aug. 20, 1915
Wolf, Guy R.	Millet	748	Aug. 24, 1915
Wright, John Henry	Mountain House	817	Nov. 17, 1915
Whitehouse, James E.	Strathmore	830	Feb. 26, 1916
Whittome, John H.	Cosmo	823	Jan. 10, 1916
White, Alvin C.	Carbon	826	Feb. 14, 1916

TRACTION ENGINEERS' Final Certificates.—*Continued.*

NAME	ADDRESS	NO. OF CERT.	DATE OF ISSUE.
Westlund, Errick	Calmar	829	Feb. 14, 1916
Wonnacott, Ford W.	Stocks	845	April 6, 1916
Wagar, Sherman	Millet	866	April 12, 1916
Wynychuk, George	Vegreville	867	April 12, 1916
Wagner, John	Rosenheim	897	April 17, 1916
Watson, William	Strome	898	April 17, 1916
Winslow, Geo. E.	Ferry Bank	898	April 17, 1916
Wroe, Walter	Cadogan	900	April 17, 1916
Winter, Peter	Battle View	914	April 25, 1916
Waletzko, Andrew	Bow Island	954	Aug. 15, 1916
Williamson, Richard T.	Lacombe	1002	Sept. 11, 1916
Williscroft, Richard G.	Namoo	1031	Sept. 14, 1916
White, George M.	Foremost	1043	Sept. 14, 1916
Winchester, Fay H.	Taber	1054	Sept. 20, 1916
Wagner, William H.	Chauvin	1088	Nov. 28, 1916
Williamson, Uriah G.	Lethbridge	1092	Dec. 11, 1916
Yates, Ray	Calgary	161	Mar. 14, 1913
Yerxa, William H.	Lethbridge	328	Aug. 12, 1913
Yoder, Ira M.	Taber	453	April 15, 1914
Young, William	Peguis	486	April 17, 1914
Yorgason, James Leroy	Granum	726	July 15, 1915
Young, Joseph V.	Youngstown	854	April 7, 1916
Zeyen, Charles	Lethbridge	423	Mar. 14, 1914
Zigannas, Nicholas	Luzan	487	April 17, 1914
Zucht, Gustav	Stony Plain	585	Sept. 30, 1914
Zarling, Paul	Kessler	927	May 17, 1916

FIREMEN'S Final Certificates.

NAME	ADDRESS	NO. OF CERT.	DATE OF ISSUE.
Allen, Frederick	Edmonton S.	8	April 26, 1913
Aris, Albert G. S.	Calgary	55	Jan. 27, 1915
Anderson, Carl C.	Calgary	104	Dec. 16, 1915
Arntsen, Andres	Wetaskiwin	113	April 17, 1916
Appleton, J. M.	Lethbridge	131	Dec. 22, 1916
Boyce, Walter E.	Calgary	23	Dec. 31, 1913
Bufus, John	Calgary	29	Feb. 19, 1914
Barnes, Arthur J.	Calgary	35	April 14, 1914
Brown, Rhad. E.	Edmonton	36	May 13, 1914
Beane, John	Calgary	41	May 20, 1914
Black, George	Calgary	47	Aug. 22, 1914
Bennett, James Edwin	Edmonton	68	April 20, 1915
Brushett, Eli	Edmonton	69	April 20, 1915
Botsford, Fred	Edmonton	79	May 12, 1915
Bowen, John Wesley	Edmonton	96	Oct. 13, 1915
Berke, Frank C.	Calgary	102	Nov. 29, 1915
Backhouse, George	Calgary	106	Feb. 18, 1916
Black, Durward A.	Calgary	107	Mar. 16, 1916
Berry, William	Wetaskiwin	114	April 17, 1916
Blair, Delbert Ross	Edmonton	122	July 6, 1916
Brock, John R.	Calgary	127	Oct. 17, 1916
Bocking, John W.	Calgary	129	Nov. 11, 1916
Bourns, Robert W.	Medicine Hat	130	Dec. 11, 1916

FIREMEN'S Final Certificates.—Continued.

NAME	ADDRESS	NO. OF CERT.	DATE OF ISSUE.
Carlslake, Albert E.	Banff	34	April 6, 1914
Copper, James A.	Edmonton	37	May 13, 1914
Carr, Thomas T.	Edmonton	38	May 13, 1914
Christian, Rufus Henry	Edmonton	49	Nov. 19, 1914
Cowie, John	Calgary	50	Nov. 23, 1914
Chandler, John W.	Lethbridge	54	Jan. 13, 1915
Croft, Robert Henry	Pocahontas	57	Mar. 26, 1915
Carlyle, David P.	Lethbridge	92	Aug. 20, 1915
Cheshire, Sam	Edmonton	97	Oct. 13, 1915
Christian, Alcide	Lethbridge	105	Jan. 13, 1916
Crosson, Thomas Alex.	Calgary	108	Mar. 16, 1916
D'Altroy, George	Medicine Hat	24	Jan. 10, 1914
Denby, Melvin S.	Calgary	45	June 20, 1914
Donald, John G.	Edmonton	58	April 5, 1915
Donald, Archibald Scott	Edmonton	70	April 20, 1915
Douglas, James	Edmonton S.	71	April 20, 1915
Dunlap, Mortimer	Calgary	84	May 18, 1915
Doherty, Ross	Edmonton	119	May 16, 1916
Dunkley, Arthur A.	Calgary	126	Sept. 13, 1916
Emeny, Thomas	Edmonton S.	72	April 20, 1915
Earsley, Floyd H.	Calgary	85	May 18, 1915
Fenton, Daniel L.	Edmonton	9	June 21, 1913
Fows, Roland	Edmonton S.	14	Oct. 14, 1913
Faure, Henri	Calgary	27	Feb. 5, 1914
Forest, John	Calgary	42	May 20, 1914
Fletcher, Thomas	Calgary	53	Dec. 17, 1914
Fowler, Arthur	Edmonton	73	April 20, 1915
Foucar, Harry	Camrose	115	April 17, 1916
Franklin, Samuel E.	Didsbury	123	July 15, 1916
Gagne, Joseph C.	Midnapore	51	Nov. 23, 1914
Glover, William	Edmonton	93	Aug. 24, 1915
Gentis, Cornelius M.	Edmonton	98	Nov. 15, 1915
Grieve, James	Edmonton	110	April 6, 1916
Hodson, John	Edmonton	15	Oct. 14, 1913
Ham, Edwin	Brickburn	39	May 18, 1914
Hunt, Samuel George	Calgary	40	May 18, 1914
Hunter, James S.	Edmonton	99	Nov. 15, 1915
Illingworth, William	Edmonton	28	Feb. 9, 1914
Lee, Elling	Calgary	3	Sept. 19, 1912
Laskey, Francis W.	Edmonton S.	16	Oct. 14, 1913
Lawrence, John	Edmonton S.	32	April 2, 1914
Langlands, James	Edmonton	59	April 5, 1915
Lindsay, John	Pocahontas	78	April 23, 1915
Levy, Ernest H.	Calgary	120	June 14, 1916
Larue, John W.	Stettler	124	Aug. 15, 1916
Miller, John B.	Calgary	1	June 21, 1912
Mendte, Theodore	Edmonton	10	June 21, 1913
Marshall, Andrew	Edmonton	43	June 8, 1914
Magee, William	Edmonton S.	60	April 5, 1915
Maddeson, Charles A.	Edmonton	61	April 5, 1915
Marshall, Fred	Edmonton	62	April 5, 1915
Matthews, William	Edmonton S.	80	May 12, 1915
Martin, John	Edmonton	101	Nov. 29, 1915
Magee, Scott T.	Calgary	125	Aug. 28, 1916

FIREMEN'S Final Certificates.—*Continued.*

NAME	ADDRESS	NO. OF CERT.	DATE OF ISSUE.
McCartney, Grant	Edmonton	4	Oct. 8, 1912
McDiarmid, Donald	Calgary	30	Feb. 19, 1914
McCormack, Sam G.	Edmonton	74	April 20, 1915
McDermid, Arch. J.	Edmonton S.	75	April 20, 1915
Nichols, Albert L.	Langdon	21	Dec. 17, 1913
Neale, William	Edmonton	48	Oct. 19, 1914
Newberry, John	Edmonton	111	April 6, 1916
Norris, Ernest	Camrose	116	April 17, 1916
Norman, William H.	Calgary	121	June 13, 1916
Orchard, William	Edmonton	77	April 20, 1915
Price, William	Edmonton	17	Oct. 14, 1913
Pelletier, Henry S.	Monarch	90	Aug. 12, 1915
Powers, Harry W.	Edmonton	95	Sept. 20, 1915
Rigimbal, Louis A.	Lethbridge	6	Jan. 15, 1913
Richardson, Thomas	Edmonton	7	Mar. 26, 1913
Ryder, James J.	Calgary	18	Nov. 7, 1913
Russell, John W.	Calgary	19	Nov. 7, 1913
Reilly, Francis	Medicine Hat	31	Mar. 16, 1914
Rogers, David	Calgary	44	June 8, 1914
Riddick, Alex.	Edmonton	63	April 5, 1915
Rowland, Frank	Edmonton	81	May 12, 1915
Spendlove, Joseph	Edmonton S.	5	Jan. 13, 1913
Switzer, Charles W.	Medicine Hat	11	July 10, 1913
Scott, Henry Joseph	Lethbridge	13	Oct. 6, 1913
Sargeant, Gordon	Banff	22	Dec. 17, 1913
Severson, Anton	Calgary	25	Jan. 12, 1914
Shultz, John D.	Calgary	26	Jan. 12, 1914
Sanderson, Thomas K.	Calgary	46	Aug. 22, 1914
Switzer, Oscar F.	Medicine Hat	52	Dec. 15, 1914
Schamuhn, Renold	Edmonton	64	April 5, 1915
Schmidt, William	Edmonton	76	April 20, 1915
Simpson, James B.	Edmonton	82	May 12, 1915
Seaman, Kenneth R.	Edmonton	86	June 15, 1915
Scott, Fred	Calgary	103	Nov. 29, 1915
Spargo, William James	Edmonton	112	April 6, 1916
Scramstad, Peter	Camrose	117	April 17, 1916
Swanson, Claus H.	Wetaskiwin	118	April 17, 1916
Shackleton, Percy C.	Calgary	128	Oct. 17, 1916
Taylor, John H.	Edmonton	56	Feb. 12, 1915
Turner, John Richard	Edmonton	65	April 5, 1915
Turnock, Charles	Edmonton	66	April 5, 1915
Willis, Percy W.	Calgary	2	June 21, 1912
Wahl, George F.	Calgary	12	Aug. 23, 1913
Williams, Frank John	Calgary	20	Nov. 27, 1913
Waller, Benj. W.	Edmonton	67	April 5, 1915
Wrench, John	Edmonton	83	May 12, 1915
Wilson, Alex.	Edmonton	87	June 15, 1915
Watson, Gabriel	Edmonton	88	June 15, 1915
Wyllie, George	Edmonton	89	July 13, 1915
Wade, William	Innisfail	91	Aug. 13, 1915
Wilson, John	Edmonton	94	Aug. 27, 1915
Whitehill, Calvin E.	Calgary	109	Mar. 16, 1916
Zinda, Bernard	Edmonton	33	April 2, 1914

CORRESPONDENCE BRANCH

L. C. CHARLESWORTH, ESQ.,
Deputy Minister of Public Works,
 Edmonton, Alberta.

Sir,—I have the honour to submit herewith the annual report of the Correspondence Branch of the Public Works Department for the year ending December 31st, 1916.

Branch.	Letters Received.	Letters Sent.	Postage	War Tax.
Engineering	30,073	24,768	\$ 579.45	\$189.84
Surveys	11,564	11,860	231.52	63.57
Coal Mines	7,213	6,882	190.90	56.49
Steam Boilers	3,788	4,247	179.46	38.37
	<u>52,638</u>	<u>47,757</u>	<u>\$1181.33</u>	<u>\$348.27</u>

CASH RECEIVED

Branch.	Entries.	Amount.
Engineering	243	\$18,139.16
Surveys	225	7,568.75
Coal Mines	526	7,192.50
Steam Boilers	570	16,878.55

	<u>1564</u>	<u>\$49,778.96</u>
Cash received and transferred to other departments		\$6,945.20
Registered letters sent	5091	
Registered letters received	915	

NEW FILES MADE AND INDEXED.

Engineering Branch	568
Surveys Branch	727
Coal Mines Branch	86

1381

In addition to the above, a large amount of work was done during the year in re-indexing our file records. This work, which I expect will be completed during 1917, should prove of great advantage as a location index to the work of the Department.

The following comparative statement will show that the general work of this branch during the past year has been almost on a par with that of 1915.

	1915.	1916.
Number of letters received	54,318	52,638
Number of letters sent	50,617	47,757
Total number of communications.....	<u>104,935</u>	<u>100,495</u>
Number of items of cash received	1373	1564
Amount of cash received	\$45,917.33	\$49,778.96
Number of registered letters received	985	915
Number of registered letters sent	5661	5091
Amount of postage used	\$1,286.36	\$1,181.33
War Tax	280.35	348.27
	<u>\$1,566.71</u>	<u>\$1,529.60</u>
Number of new files made and indexed	1666	1381

Respectfully submitted,

W. T. AIKEN,
Chief Correspondence Clerk.

ACCOUNTANTS' BRANCH

Edmonton, February 5th, 1917.

L. C. CHARLESWORTH, Esq.,

Deputy Minister of Public Works,

Edmonton, Alberta.

Sir,—As Accountant of the Department of Public Works, I have the honour to submit my report for the year ending December 31st, 1916.

Below you will find, in detail, the work of the Branch:—

Number of vouchers passed to the Treasury Department for payment during 1916	14,915
Number of accounts passed for payment in connection with Local Improvement Trust Account "A" during 1916	879
Total number of vouchers	15,794

This total of 15,794 vouchers covered 14,835 accounts and 4,369 paylists, making a total of 19,204 accounts examined and passed for payment by the branch during the year.

All accounts were posted to their respective ledgers, which have been duly audited by the Provincial Auditor and found correct.

Number of cheques issued in connection with Local Improvement Trust Account "A" during the year	2,714
Number of cheques issued in connection with General Revenue Suspense Account during the year	223
Total number of cheques issued during the year	2,937

The total amount of Revenue received from all sources, and deposited with the Provincial Treasurer was \$73,026.94. The total amount placed to the credit of General Revenue Suspense Account was \$11,602.92, and of this amount there was transferred to General Revenue and refunded, \$9,693.49, leaving a cash book balance on hand at December 31, 1916, of \$1,909.43.

The above amounts were duly posted to their respective cash books, which have also been audited by the Provincial Auditor, and found correct.

The staff consisted of the accountant, assistant accountant, and five clerks, making a total of seven.

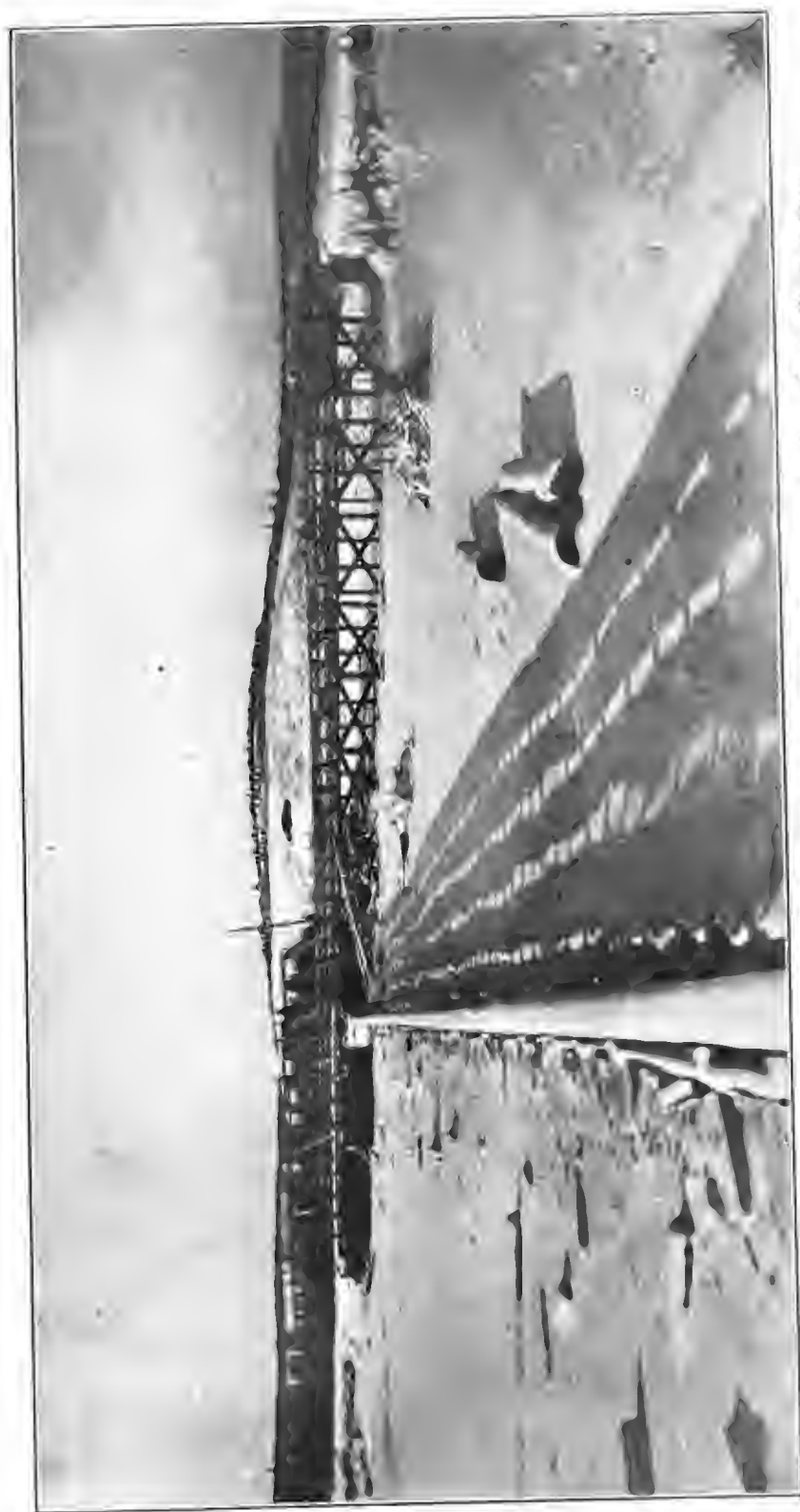
Respectfully submitted,

T. S. S. DAVIES,

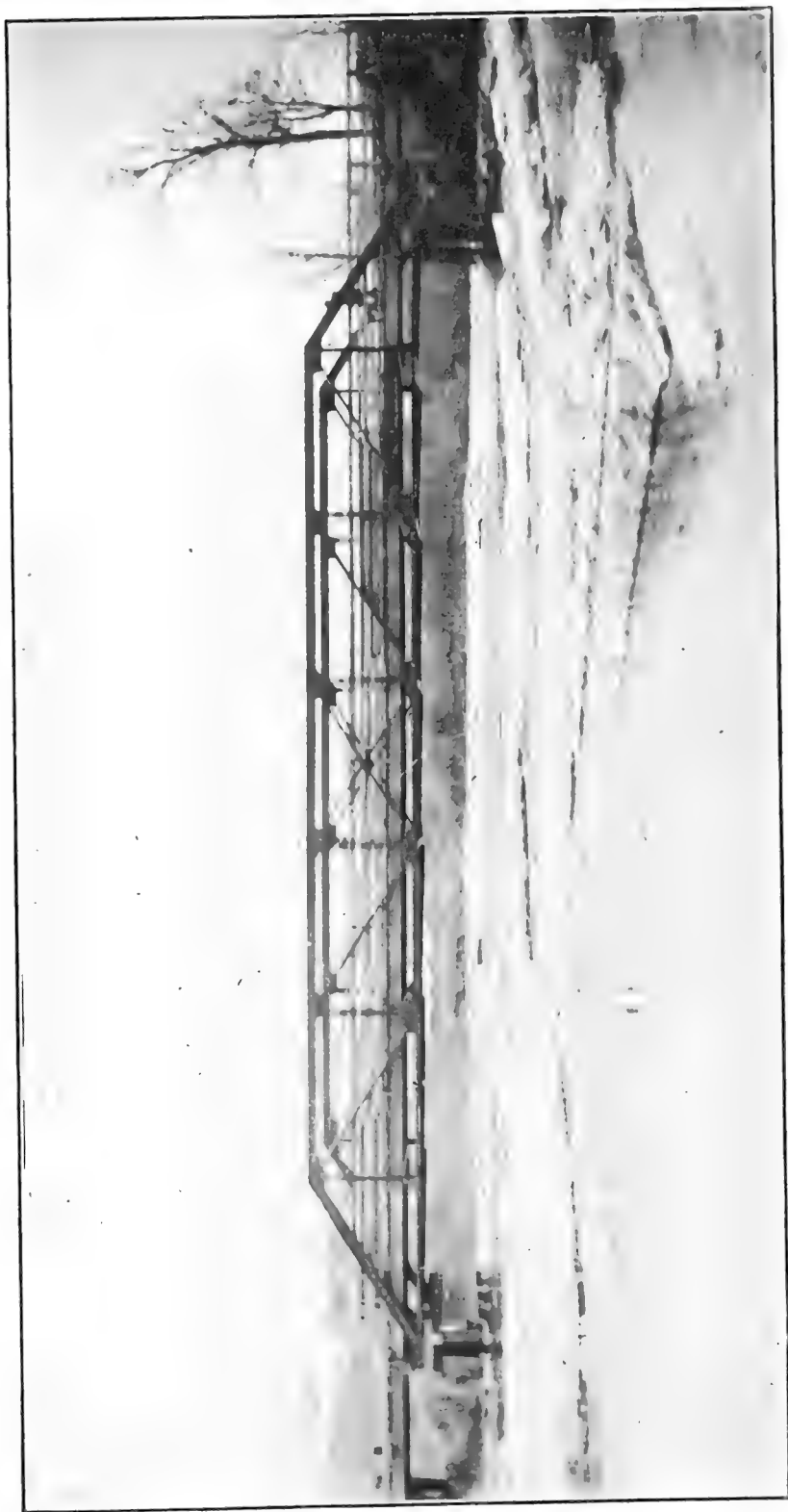
Accountant.



125' STEEL SPAN ON CONCRETE ABUTMENTS, BLINDMAN RIVER,
SOUTH OF BLACKFALDS.



TWO 50' TIMBER TRUSSES AND NINE 20' SPANS, EAST APPROACH TO BRIDGE OVER RED DEER RIVER, WEST OF OGDEN.



100' STEEL SPAN OVER BATTLE RIVER, N.E. OF HARDISTY.



THREE 125' SPANS ON CONCRETE PIERS OVER RED DELA RIVER, WEST OF OLDS. PROTECTION WORK, WEST BANK.



POWER FERRY AT PEACE RIVER—RUNNING IN ICE.



POWER FERRY AT PEACE RIVER.



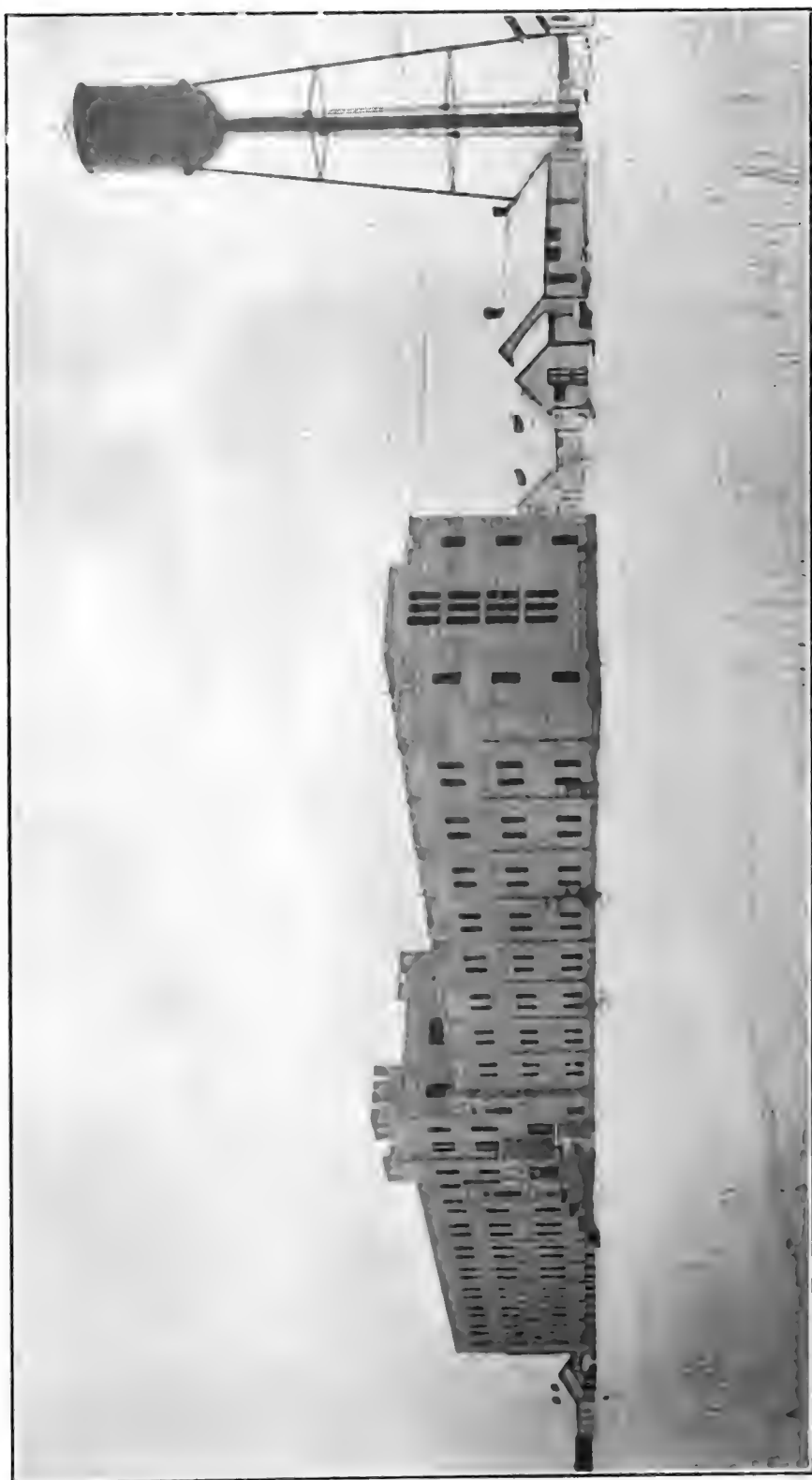
BIRDSEYE VIEW OF HOSPITAL FOR INSANE AT PONOKA, SHOWING PROPOSED EXTENSIONS.



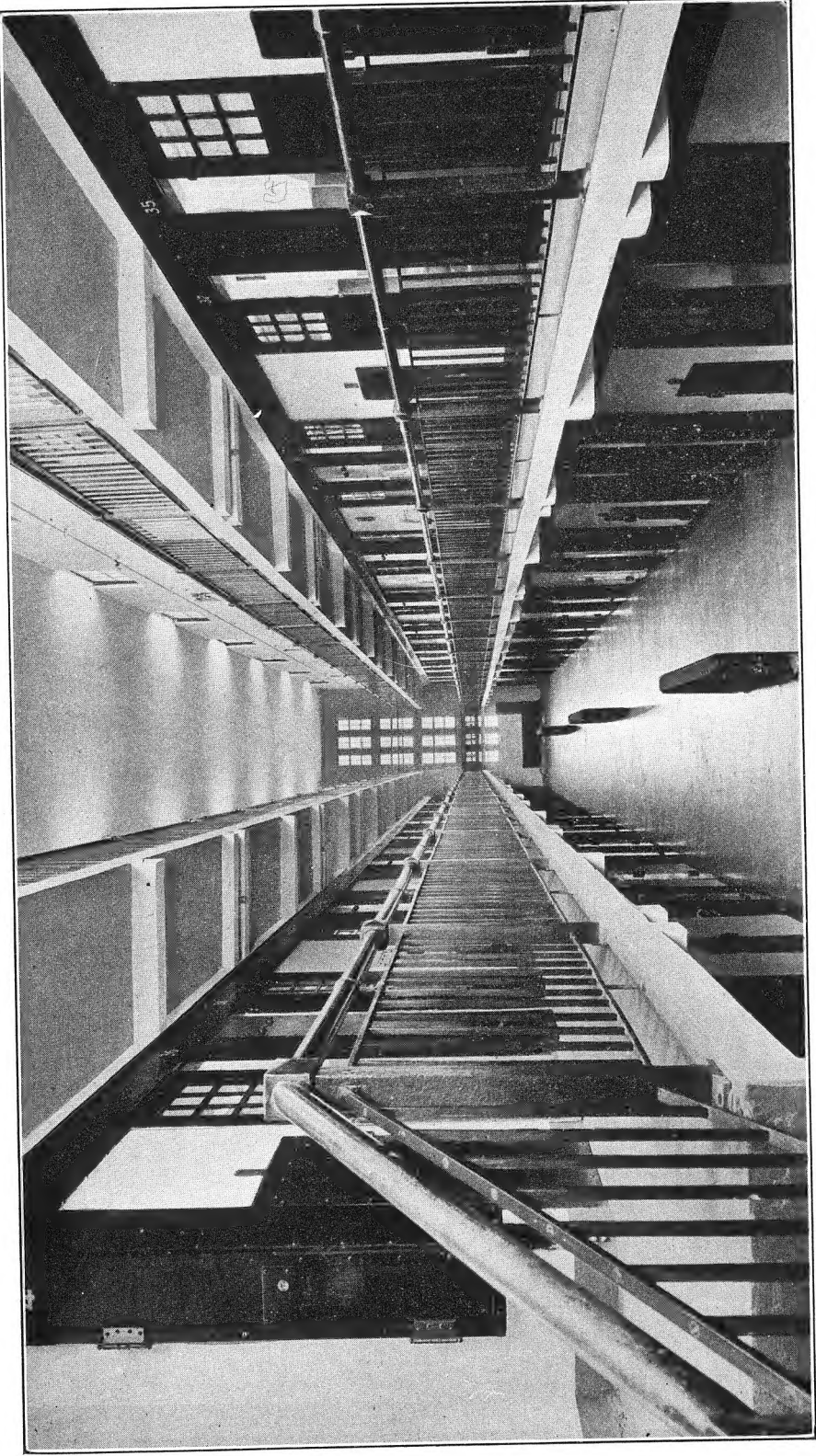
VIEW OF MAIN HALL, FROM LEGISLATIVE CHAMBER, PARLIAMENT BUILDINGS.



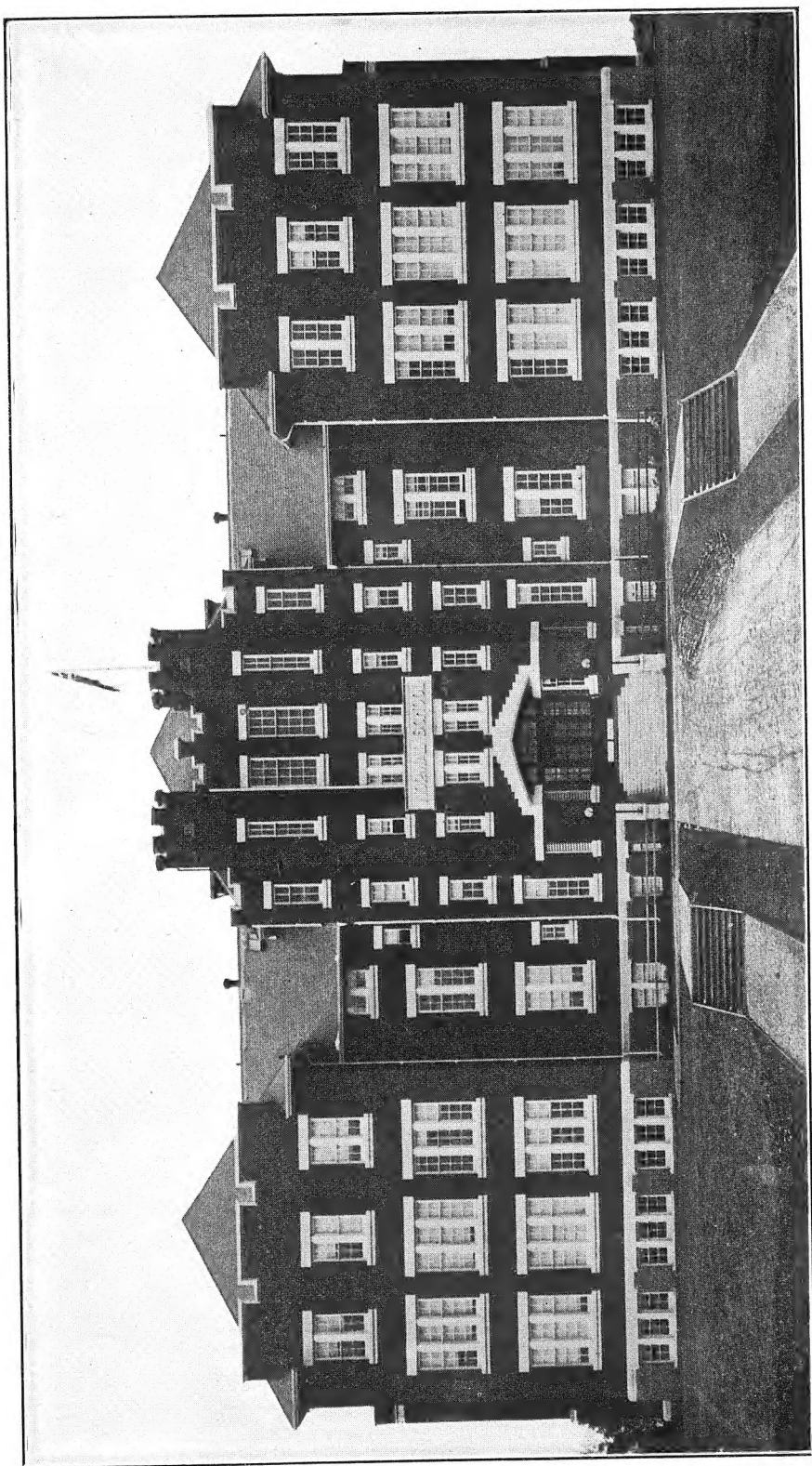
FORT SASKATCHEWAN GAOL—ENTRANCE.



FORT SASKATCHEWAN GAOL.



CELL CORRIDOR—FORT SASKATCHEWAN GAOL.



CAMROSE NORMAL SCHOOL.

